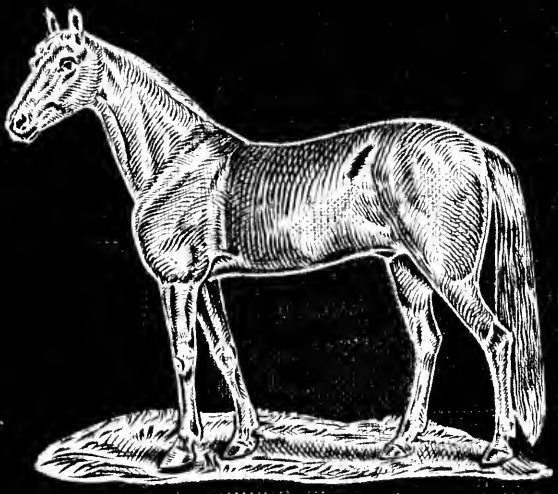
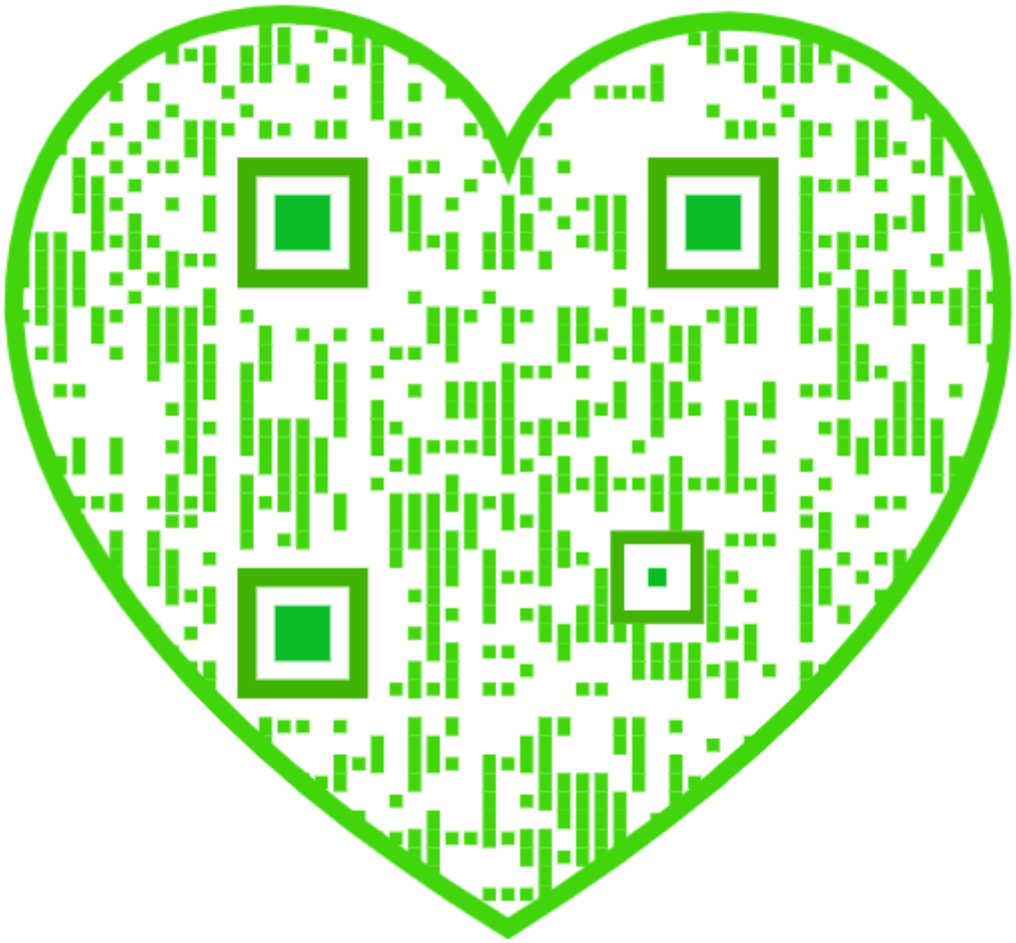




COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

JOHN A. SEAVERNS

3 9090 014 666 297

Webster Family Library of Veterinary Medicine
Cummings School of Veterinary Medicine at
Tufts University
200 Westboro Road
North Grafton, MA 01536

Yours truly
John Dimon

AMERICAN HORSES

AND

HORSE BREEDING.

A Complete History

OF THE

HORSE FROM THE REMOTEST PERIOD IN HIS HISTORY TO DATE.

The Horseman's Encyclopedia and Standard Authority on Horses,

EMBRACING

BREEDS, FAMILIES, BREEDING, TRAINING, SHOEING, AND GENERAL MANAGEMENT.

THE MODERN AND PRACTICAL HORSE DOCTOR

ON THE

CAUSE, NATURE, SYMPTOMS, AND TREATMENT

OF

DISEASES OF ALL KINDS.

Profusely Illustrated.

JOHN DIMON.

HARTFORD, CONN.:
Published by John Dimon.
1895.

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

Entered according to Act of Congress in the year 1895,
By JOHN DIMON,
In the office of the Librarian of Congress, at Washington, D. C.

All Rights Reserved.

THE CASE, LOCKWOOD & BRAINARD CO., HARTFORD, CONN

Dedication.

To Mr. ROBERT BONNER,

THE GREAT LOVER OF GOOD AND FAST HORSES, AND WHO, BY HIS LIBERALITY IN PURCHASING AT HIGH PRICES, HAS DONE MORE FOR THE ENCOURAGEMENT OF BREEDING THE "AMERICAN TROTTER" THAN ANY OTHER MAN LIVING, THIS VOLUME (WITH HIS CONSENT AND APPROVAL) IS RESPECTFULLY DEDICATED, AS A SLIGHT TOKEN OF RESPECT, BY THE AUTHOR,

JOHN DIMON.

CONTENTS.

PREFACE, ... 17
INTRODUCTION, ... 19
AUTHOR'S REMARKS, ... 21
PLAN OF THE BOOK, ... 23

CHAPTER I.

THE HORSE.

Embracing his birthplace — Earliest history — Advent into America — Climatic influence and food — Greek mythology claiming immortality — The first horse-dealer of the world, ... 25

WILD HORSES OF AMERICA.

Their origin, habits in a wild state — Males have frequent contests for supremacy — Their modes of warfare — Origin of the Indian Pony and Mustang — Breeds and what constitutes a breed — Skill required in forming new breeds — Names of eleven distinct breeds in America, . 31

CHAPTER II.

THE ARABIAN HORSE.

Mahomet its founder and the first breeder of blood-horses of the world — Foundation mares for Mahomet's stud — Beautiful points of the Arabian — The Arabian, the foundation of the English thoroughbred — Arabian blood in the Percheron, Morgan, and Narragansett Pacer. Six distinct breeds in Arabia — History of the Lindsey's Arabian — Importation of Grand Bashaw in 1820. Importation of Ishmael Pacha in 1872 — A. Keen Richards' views on breeding the Arabian in Kentucky — Difficulty of obtaining good specimens in Arabia, . . . 35

CHAPTER III.

THE THOROUGHBRED HORSE.

The oldest and best established breed of America and Europe — Breed built up on an Arabian and Barb foundation — The Darley Arabian — Definition of *Thoroughbred* — Imported Messenger — Imported Diomed — Imported Trustee — America's greatest sire, Lexington — Value of thoroughbred stallions — Influence of the thoroughbred in American-bred horses, ... 44

CHAPTER IV.

THE NARRAGANSETT PACER.

The origin, rise, and progress of the breed — Daniel Pearce and his Stallion Rambler — Imported Rambler — Rambler as a Stock-horse — Great durability of the Narragansetts —Demand for export — Narragansett blood in the Morgans — "Little-neck Beach," Narragansett, R. I., as a race-course for the pacer in 1720 — Mary Langworthy Southcote of York, England, as connected with the history of the Pacer, ... 52

CHAPTER V.

THE FRENCH CANADIAN HORSE.

Early Imported into Canada from France — Climatic influence on the early horses of Canada — Hardiness and utility of the Canadian horse — Canadian blood in the American trotter and pacer — Noted Canada horses brought to the United States — Surry, the dam of Henry Clay, was a Canadian, ... 56

CHAPTER VI.

THE MORGAN HORSE.

The Morgans strictly an American breed — Beauty and power of endurance — Justin Morgan the founder — Pedigree of Justin Morgan — Description of Justin Morgan — Sherman Morgan — Pedigree of Sherman Morgan — Vermont Black Hawk, pedigree and history — Ethan Allen, his pedigree and history — Daniel Lambert, the great sire of beautiful roadsters and gentlemen's driving-horses — Daniel Lambert's table of honor as a sire of speed, ... 60

CHAPTER VII.

MORGAN HORSES — Continued.

Woodbury Morgan — Royal Morgan — Morgan Cæsar — Green Mountain Morgan — Morgans for stage purposes — Morgan horses for cavalry service — Morgans adapted to rough and hilly roads of New England — Morgans as trotters — Ripton — Last Message of Ethan Allen, . 72

CHAPTER VIII.

RYSDYK'S HAMBLETONIAN.

History and pedigree — The Charles Kent Mare — Imp. Belfounder — Abdallah the sire of Hambletonian — Hambletonian's Stud Career — Great Value of Horses sired by Hambletonian — Hambletonian's sons of renown, ... 82

CHAPTER IX.

ALEXANDER'S ABDALLAH.

Pedigree and early history — Potency in speed for generations — Sprague's Hambletonian one of his best sons — Sprague's Hambletonian sire of Gov. Sprague — Alexander's Abdallah in motion. 90

CHAPTER X.

THE ELECTIONEERS.

Electioneer, the greatest trotting sire of the world — Superior to his sire in beauty of form and style of movement — Fully developed and natural trotter — Put to severe test by crossing on thoroughbreds — Marvin's description of Electioneer — Ability to get early and extreme speed — Electioneer's list of performers and dams of performers, ... 93

CHAPTER XI.

THE BASHAWS AND CLAYS.

Grand Bashaw, an Imp. Arabian, the founder of the families — Young Bashaw, the founder of the Bashaw family of American trotters — Andrew Jackson, founder of the Clay family — Green's Bashaw — The Patchens, ... 106

THE BLUE BULLS.

Wilson's Blue Bull — His great success in the stud — Great progenitor of harness speed — List of trotters and dams of trotters sired by Blue Bull, ... 106

CHAPTER XII.

THE AMERICAN TROTTING HORSE.

As a breed — Component parts constituting the breed — Establish the American thoroughbred trotter — The American trotter as he should be bred — Breed for beauty, brains, and business — Breeding the trotter a progressive science — The American Trotter an American production — Chance trotters — Racing in early days — Connecticut the first State to produce the trotter — The trotting horse Yankee — The two-minute horses, ... 117

CHAPTER XIII.

CLEVELAND BAY.

Their origin and especial merits — As now bred — The demand in this country, ... 125

FRENCH COACH HORSE.

The Government studs of France — The wonderful knee action of the French Coach horse — Color, ... 128

CHAPTER XIV.

THE PERCHERON HORSE.

Breed divided into three classes — Percheron, son of the Arabian — As a draft horse — Road qualities of the Percheron, ... 135

ENGLISH DRAFT OR SHIRE HORSE.

Origin and history — Disposition — Importers, ... 137

THE CLYDESDALE HORSE.

Introduced into Scotland in the 13th century — Clydesdale Society of America — Importers, ... 139

CHAPTER XV.

SHETLAND PONIES.

The Shetland Isles — Sustained by the survival of the fittest — The purest of all breeds of ponies, ... 141

CHAPTER XVI.

HORSE BREEDING.

Principles of Breeding — Breeding a scientific study — Nature's great law — Breed for a purpose — Selection of the breed — Choice of the sire — Breed best mares only — Intelligence, beauty, and disposition very essential elements, ... 145

CHAPTER XVII.

SELECTING BREEDING STOCK.

Importance of starting right — Selecting the stallion — Influence of the dam on the foal — Stallion for stock purposes should be out of the best mares of the breed — Best age for stallions, ... 151

SELECTING THE BROOD MARE.

Dams usually have more influence on foals than the sires — Unsound mares for breeders, ... 155

CHAPTER XVIII.

CARE AND MANAGEMENT OF THE STALLION.

Box Stall — Paddock — Treat kindly — Avoid undue familiarity — Feed regularly — Exercise — Avoid pampering — Grassing — Winter care — Carrots as food — Keep clear of worms — Controlling when in use, 159

CHAPTER XIX.

CARE AND MANAGEMENT OF BROOD MARES.

Getting doubtful mares in foal — Eternal vigilance price of success — The productive period — Period of gestation — Marking their foals — Use the brood mare — Stabling pregnant mares — Wheat middlings as food — Enlargement of the abdomen — Attention at foaling time — Jealous mothers, ... 164

CHAPTER XX.

MANAGEMENT OF THE FOAL.

Care of young foals — Getting to nurse — Evacuation of the bowels — Injections — Feeding the foal — Injured by heated milk from the dam — Raising by hand — Weaning — Scant feeding deplored — Caring for weanlings — Halter breaking — Oats as food — Handling — Breaking Foals — Naming the Colt, ... 171

CHAPTER XXI.

BREEDING THE AMERICAN TROTTER.

Speed one of the most attractive features — Only a small portion trot fast — Breed for beauty, size, style, and action — Demand for first-class roadsters and gentlemen's drivers always in advance of supply —

Easier to breed beauty than speed — The standard craze — The French ahead of Americans as regards general horse breeding — Selecting breeding stock — American Trotter the most modern breed — Color — Rysdyk's Hambletonian and his best sons — Mambrino Chief — Blue Bull — Early foals preferable — Good care important, . . . 177

CHAPTER XXII.

OLD-TIME TROTTERS.

Topgallant — Ripton — Lady Suffolk — Flora Temple — Ethan Allen — Geo. M. Patchen — Geo. Wilkes — Goldsmith Maid — American Girl — Betting on races — Dutchman — Americus — Columbus — Lady Suffolk, *In Memoriam*, ... 189

CHAPTER XXIII.

FLORA TEMPLE.

Pedigree and place of breeding — Sale to Wm. H. Congdon for $13 at 4 years old — Her sale to Jonathan Vielee — Sale to Geo. E. Perrin of New York city — Her first race (in 1850) — Her peculiar race against Whitehall, Delaware Maid, Napoleon, and Hiram — Her races in 1852 — Her sale in 1852 for $1,000 — Her 21 races in 1853 — Flora's great race against Lancet for $3,000 — Flora's sale in 1858 for $8,000 — Her best race of her life was in 1860 against Geo. M. Patchen when she won three straight heats by a throatlatch — Flora's last race was in 1861 — Flora was confiscated to the U. S. government in 1861 — Sold in 1864 for $8,000 when 19 years old, ... 199

CHAPTER XXIV.

ETHAN ALLEN.

Color and description — Breeding — A natural-born trotter — Eighteen years on the trotting turf — His great race against Dexter in 1867 — Crowned King of the Morgans — King of all trotting stallions of his day — His success in the stud — His death in 1876 — Ethan Allen, *In Memoriam*, ... 209

GOLDSMITH MAID.

Her breeding and pedigree — Sold at 8 years for $350 — Her purchase by Alden Goldsmith — Sold in 1870, when 13 years old, for $35,000 — Her races in 1871 — In 1874 she lowered the trotting record of the world to 2:14 — Trotted in 2:14 at 20 years old — Retired to the breeding stud in 1876 — Goldsmith Maid, *In Memoriam*, . . . 211

CHAPTER XXV.

GEORGE M. PATCHEN.

Foaled 1849 — Pedigree — Distanced by Ethan Allen 1858 — Unfinished race with Flora Temple in 1859 — Defeated Ethan Allen in 1860 — His last race 1860 with Flora Temple — Died in 1864 — Sire of the campaigners Geo. M. Patchen, Jr., and Lucy, ... 215

GEORGE WILKES.

Founder of the Wilkes family — Pedigree — Raised by hand — First trotted under name of Robt. Fullingham — Defeated Ethan Allen, 1862, winning $10,000 — Defeated Lady Thorne in 1868 — His record 2:22 made 1868 — Died in Kentucky in 1882, aged 26 years — Roll of honor, ... 216

CHAPTER XXVI.

DEXTER.

Place of breeding and pedigree — Recognized "king of the trotting turf" — Commenced turf career in 1864 and ended in 1867 — Timed a separate mile in 2:16 in his great race with Ethan Allen — Gen. Grant's ride after Dexter — Died in 1888 at 30 years, ... 221

AMERICAN GIRL.

Pedigree and birth — Her sale for $3,500 — Won many thousand dollars in races — Died in harness — Monument erected to her memory, . . 223

CHAPTER XXVII.

THE FIVE GREAT TROTTING BROOD MARES OF THE WORLD.

GREEN MOUNTAIN MAID: Dam of nine in 2:30 list — Two in 2:20 — One in 2:20¾ — Dam of the great Electioneer, with 155 trotters in the list — Pedigree, ... 226

BEAUTIFUL BELLS: Pedigree — Dam of seven in 2:30 list — Dam of sixteen foals, ... 227

MISS RUSSELL: Pedigree — Dam of nineteen foals — Dam of Maud S., 2:08¾, etc. — Canadian blood mingled with thoroughbred in pedigree, ... 227

DOLLY: Pedigree — Dam of three great sires — Dam of Czarina — Object lesson for breeders, ... 228

ALMA MATER: Pedigree — Dam of eight 2:30 trotters — Dam of Alcantara — Threw trotters to six different stallions, ... 228

CHAPTER XXVIII.

BREAKING AND TRAINING COLTS.

Educate *vs.* breaking — First lessons to teach — Bitting — Teach "whoa" — Give short lessons — Reward good behavior — Hitching double — Patience required — Kicking — Shying — Confidence — Training for draft — Train in line, ... 229

CHAPTER XXIX.

TRAINING FOR SPEED.

High-bred and high-mettled most easily educated — Give lessons on track, street, or road — Early development of speed — Watch temper and disposition — Short brushes recommended — Don't overwork — Skeleton wagon — The mouth — Pulling — The check, ... 236

CHAPTER XXX.

TRAINING VICIOUS HORSES.

Old English method — Biting, kicking, and balking — Patience and firmness required — Causes of balking — The cord — Isolation for balkers — Kicking in harness — Checking — Biting, Rarey's method of curing — War Bridle — Pulling on the halter — Shying — Pawing in stall, . 242

CHAPTER XXXI.

TRAINING CIRCUS HORSES.

Height of perfection in training — Skillful education — Mild treatment best — Sensible to applauds of the audience — High prices of well-trained ring-horses, ... 253

CHAPTER XXXII.

FEEDING AND STABLE MANAGEMENT.

Value of different foods — Neatness and cleanness — Change of food necessary — Treat kindly — Indian corn — Watering — Overfeeding — Corn meal — Flax seed — Roots — Light and ventilation — Blankets, 256

CHAPTER XXXIII.

MANAGEMENT OF TEAMS ON THE FARM AND ON THE ROAD.

Don't rush in the morning — Good *vs.* poor teamsters — Don't yell — Don't swear — Noon feed — Groom properly — Food — Blankets, etc , 262

CHAPTER XXXIV.

MANAGEMENT OF ROAD AND DRIVING HORSES.

Start out moderate — Long distance driving —Water frequently — Checking — Hitching to buggy — Whip — Feeding on the road — Short distance driving — Have reins well in hand, ... 266

CHAPTER XXXV.

HANDLING AND MANAGING TROTTERS.

Author as a judge in races — The trainer — The driver — The swipe — Big-head — Early *vs.* Late Training — Toe weights — Jogging — The Mouth — Stabling — Treating a warm horse — Time to succeed, . 271

CHAPTER XXXVI.

BUYING AND SELLING HORSES.

Requisite qualification — Location — Suavity — Expert on horses — Buying for the market — Showing sale horses — The coachman, . . 281

CHAPTER XXXVII.

SWAPPING HORSES AND HORSE JOCKEY TRICKS.

Author's experience in trade — Brighton Market — Swapping with a minister — Putting off for slight faults — My neighbor's horse-trade — Getting a fitty one, ... 289

CHAPTER XXXVIII.

DENTITION AND AGE AS SHOWN BY THE TEETH.

Description of teeth at different ages — Number of a full set — Classes — Bishoping — Explanatory cuts — Shedding — Full mouth — General signs of old age — Comparative age of man and horse — Great age of horses — Zoölogists' claim, ... 300

CHAPTER XXXIX.

THE LANGUAGE AND SAGACITY OF THE HORSE.

Author's experiences — Old Dobbin — Nellie Bly — Lady Barebones — Fanny Fern — Cora Linn — Fanny Kenyon — Maggie Dimon — Belmont Maid — Golden Rule — Rufus Molburn's Mare, ... 308

CHAPTER XL.

GRAY HORSES.

The White Turk — Places White Turk — Imported Messenger — Harris' Hambletonian — Gray Eagle — Crack regiment of the British army — On the American turf — Kitty Bayard — Emma B. — Joe Brown — Miss Russell — Pilot Medium, ... 316

EXHIBITION OF HORSES.

The first National in Springfield, Mass., in 1853, ... 319

CHAPTER XLI.

THE HORSE'S FOOT.

The Wall — The Sole — The Frog — The Bars — Coffin-bone — Pedal bone, ... 320

SHOEING HORSES.

First introduced into England, A.D. 1060 — Public shoers should be required by law to understand the business — Injuries by bad shoeing numerous — Leveling and balancing — No foot, no horse — Never pare the sole or frog — Fit the shoe to the foot — The clip — Use of the rasp in shoeing — Fiber shoes, ... 324

CHAPTER XLII.

THE CHECK REIN.

Taut checking injurious — The Over-draw check — Study the *natural* beauty of the horse — Stumbling, ... 332

CHAPTER XLIII.

A BRIEF HISTORY OF VETERINARY SCIENCE.

Necessity the mother of invention — First veterinary school of the world, Lyons, France, 1761 — First in England, 1795, ... 336

QUACK MEDICINES.

Generally well advertised — Opinionated grooms — Veterinary quacks, . 340

CHAPTER XLIV.

GIVING MEDICINE.

Medicine best in balls — Dimon's Spavin Cure — Dimon's Colic Remedy — Dimon's Black Oil — Liniments — Ointment — Salve — Dimon's Liniments — Dimon's Condition powders — Dimon's Leg-wash, . . 345

SYMPTOMS OF DISEASES.

The Pulse — The Ears — Membrane of the nose — Eyes — Mouth — Breathing — Skin — Flanks — Drooping of the head — Lying down — Pointing with nose and foot, ... 348

CHAPTER XLV.

HORSE AILMENTS AND HOW TO DOCTOR THEM.

Bone Spavin — Bronchitis — Brittle Hoof — Blindness — Blistering — Bots — Cataracts — Contraction of Hoof — Colic — Capped Hock — Curbs — Cough — Corns — Distemper — Diarrhœa — Drying the Sweat — Fever — Fistula — Founder — Fits — Galls — Glanders, . 351

CHAPTER XLVI.

HORSE AILMENTS AND HOW TO DOCTOR THEM—Continued.

Heaves — Inflammations — Indigestion — Lameness — Lampas — Lung Fever — Lice — Locked Jaw — Mange — Proud Flesh — Pleuro Pneumonia — Poll Evil — Quitor — Roaring — Ringbone — Scratches — Stumbling — Shoe Boil — Slavering — Seatons — Strains — Sprains — Surfeit — Splint — Stocking — String Halt — Sweeney — Thrush — Tumors — Tail Rubbing — Thick Water — Thoroughpin — Thumps — Wind Galls — Worms, ... 375

CHAPTER XLVII.

MISCELLANEOUS.

Gentlemen horsemen — To become famous — Castration — Conditioning — To administer chloroform — Significance of the Bay color — Docking — Warranty — Runaway to stop — Trotting standard — Pacing standard — Rules for laying out tracks — Rules of admission, . . 400

CHAPTER XLVIII.

The World's Fastest Records — Fastest Records, All ways of going — Breeding of the fastest horses — Tables of fastest records, . . 411

APPENDIX.

Giving names, description, characteristics, etc., of upwards of one hundred of the author's most noted horses — Author's concluding remarks, etc., ... 425

INDEX TO ILLUSTRATIONS.

AGE AS SHOWN BY TEETH, ... 301–304
AGRICOLA, ... 137
AMERICAN TROTTER, ... 265
ARABIAN HORSE, ... 35
AUTHOR, ... *Frontispiece.*
BAYARD, ... 236
BLACK HAWK, ... 117
BLUE BULL, ... 108
CANADIAN HORSE, ... 55
CHECK REINS, ... 332–334, 406
CLAMPS FOR CASTRATION, ... 403
CLEVELAND BAY HORSE, ... 125
CLYDESDALE STALLION, ... 139
CONTRACTED FOOT, ... 323
CORN ILLUSTRATED, ... 364
DANIEL LAMBERT, ... 177
DENTITION AND AGE ILLUSTRATED, ... 301–304
DIMON, JOHN, ... *Frontispiece.*
DISEASE (*Illustrated Cuts*), ... 352, 344, 368
DOCKING (*Three Cuts*), ... 406
ENGLISH SHIRE HORSE, ... 137
ETHAN ALLEN, ... 209
FLORA TEMPLE, ... 199
FOOT CONTRACTED, ... 323
FOOT SHOWING CORN, ... 364
FOOT READY FOR SHOE, ... 325
FRENCH COACH HORSE, ... 128
GENERAL, ... 281
GREEN MOUNTAIN MORGAN, ... 145
GREEN MOUNTAIN MAID, ... 225
GROUP OF SHETLAND PONIES, ... 171
GOLDSMITH MAID, ... 211
HAMBLETONIAN, ... 81
HORSE ILLUSTRATED, ... 336, 368
HOCKS ILLUSTRATED, ... 362
IMPORTED MESSENGER, ... 43
INTACT, ... 128
ISHMAEL PACHA, ... 35
JUSTIN MORGAN, ... 59

La Canadienne, ... 55
La Ferte, ... 135
Lady Suffolk, ... 195
Leg, Showing Arteries, etc., ... 353
Leg, Showing Pastern, etc., ... 354
Marmion, ... 125
Messenger, ... 43
Motion, ... 271
Overdraw Check, ... 332–334, 406
Pasterns, etc., ... 354
Percheron, ... 256
Percheron Stallion, Imp. La Ferte, ... 135
Prince Rudolph, ... 139
Profile of head and face, ... 305
Robt. McGregor, ... 141
Romulus, ... 25
Rysdyk's Hambletonian, ... 81
Satellite, ... 151, 265
Sherman Morgan, ... 72
Shetland Ponies, ... 171
Shetland Stallion, ... 141
Skeleton of the Horse, ... 336
Spavin (*Illustrated*), ... 351
Sound Foot ready for Shoe, ... 325
Stockton King, ... 93
Teeth showing Age, ... 301–304
The Author, ... *Frontispiece.*
The Check-rein, ... 332–334, 406
Typical Morgan Horse, ... 145
Under Surface of Foot, ... 323
Victoria, ... 163
Vermont Black Hawk, ... 117

PREFACE.

IN presenting this book to the public, I wish to say that I have no hobby or pet theory to advertise, but have striven to give, in a condensed form, all that I know of this noble and useful animal, the horse, after having made him a study for more than half a century; embracing what I have learned of him from history, both verbal and written, and from observation and experience, as well.

This said experience embraces a period of nearly sixty years; during which time I have ridden, driven, worked, bred, handled, trained, bought, sold, traded, castrated, and doctored, perhaps no less than five thousand animals. I have owned and handled for stock purposes some quite good stallions, and in all cases of a quality to materially improve the horse stock of the section in which they stood for service.

I have been personally acquainted with many of the most noted horsemen of America for the last forty years, and knew most of the old time notable trotters; but after all, as my friend, the late Dr. Levi Herr, once said: "The practical and experienced, as well as the aged horsemen and breeders, are under the tuition of professional lawyers, such as—— ——," naming several of that time,—"who have learned more by studying law on horsemanship, breeding, training, etc., than we who have made a life study of the same. They have suddenly jumped their professions and are now professors of breeding, training, and horsemanship in full."

My own experience with horses, in both the United States and Canada, embraces castration, conditioning, and many years of general veterinary practice which has proven very successful, and I believe in all cases satisfactory to my patrons. Still, I am not a professional veterinary surgeon, sporting a diploma; neither am I a professional driver in races. I have bred many

good and fast roadsters with breeding good enough for fast records, yet I have never entered a horse in a trotting race for money or bet on the results of a horse race in my life.

We measure genius not merely by a man's social status but by the "empire of his ideas," the results which they enforce and the benefits which inure through them to the world. I have had a long-cherished wish to be in some way a benefactor to my country, and believe by giving to the breeding public my views founded on so many years of study, observation, and practical experience, I can best accomplish that end.

I virtually commenced this book in 1866 (some 28 years ago). I have been greatly assisted in this work, as to information, etc., and especially as to the true pedigree of Justin Morgan, by such gentlemen as the Messrs. McClellan of Woodstock, Conn. (father, uncle, and cousins of the late Gen. Geo. B. McClellan), and other gentlemen of Connecticut and Massachusetts.

Should I attempt to narrate one-half of what has been told me by such venerable horsemen, or to produce one-quarter of my correspondence with such persons, that matter would of itself make a book double the size of this; consequently, I confine myself to the facts gathered as being of more importance to my readers than to oblige them to wade through the waters that I have passed through in order to gather them.

As to the illustrations contained herein, I have endeavored to give the true likeness of a few of the most noted horses mentioned, and that of myself, the author, thinking that these may be both interesting and instructive to my readers; but have refrained from filling up the book with illustrations foreign to the object of the work for the sake of making an unnecessarily large and high-priced book.

I have been too much of an investigator and too liberal in my views to get rich in this world, but have endeavored to so live that after my death my children might feel proud of being the sons and daughters of

JOHN DIMON.

INTRODUCTION.

ONE of the first questions naturally asked by the would-be purchaser and reader of this book will be: "Who is Dimon, and what does he know about horses? Is he a practical horseman, or a mere theorist like so many others, who, in their eagerness to teach, have so long attempted to teach that of which they knew so little?"

This country, for years past, has been literally flooded with "horse literature," some of which has been of a character that will require years of careful teaching to unteach what it has taught.

"Well, who is Dimon, the author of this book?" It is John Dimon, born on Mount Hope Farm, Bristol, R. I., near the spot where that great Indian warrior, the chief of the Narragansetts,—King Philip,—was captured. Born in 1828; his ancestors were natural horsemen, one of whom was the founder of a breed of horses in this country, known as the Narragansett Pacer. This ancestor was an Englishman, and belonged to one of the oldest horse-breeding and horse-loving families of England at the time of the improvement of the English horse by the introduction of the Arabian and Barb blood in the days of the reign of Queen Anne.

"Well, is John Dimon, the author of this book, capable of teaching the world as regards the horse?" From his earliest recollection the author was an ardent admirer of live stock in general, and the horse in particular. Memory recalls the time when but five years old his favorite child's playthings were feathers of fowls and birds, which he, in his childish imagination, designated as horses and cattle of different classes, according to their shape, etc. For picture books, those containing

the pictures of horses and other animals were the ones most desirable.

From that time on he has ever been a keen observer, a deep thinker, a practical caretaker, handler, breeder, dealer, trainer, and doctor, of this, to him, the most favorite animal of the world, the horse; and in giving to others this life-long experience, it seems clearly evident that he *must* be capable of teaching, and that his teachings, as presented in this book, cannot be otherwise than instructive and profitable.

AUTHOR'S REMARKS.

AS acknowledgments received of my knowledge of horses and my ability to judge, care for, and give instructions relative to, at different periods, I will mention a few, as perhaps not being out of place here.

In 1855, when a young man of twenty-seven years, I was unanimously appointed a judge of horses in the stallion class at the United States Agricultural Society's Fair, held in Boston, Mass., and where Ethan Allen and many other noted stallions of that day were exhibited.

At the outbreak of the civil war in America, in 1861, I was offered a lieutenant's commission to go out with the First Rhode Island Cavalry, as general superintendent of horses of that cavalry.

In 1870, on the occasion of acting as mounted escort to the President of the United States, Gen. Grant, on his memorable Fourth of July visit to Woodstock, Conn., as the guest of Henry C. Bowen, of the *New York Independent*, at a halt on our line of march from Putnam to Woodstock, I was introduced to President Grant by Mr. Bowen, as being one of the enterprising young men of Windham county. The President remarked that I was mounted on a good animal which he would wager was a Morgan. Mr. Bowen's reply was: "Mr. Dimon is considered one of the best horsemen in this State, and if he rides a poor horse it is not for want of judgment in selecting."

In 1872, during the time of the great wide-spread epidemic among horses called "epizootic," which for a time prostrated nearly all the horses in the country, and which proved fatal to so many, I had under my charge no less than twenty good ones,

representing at that time not less than ten thousand dollars, among which was the imported thoroughbred stallion, Hampton Court, and other notables of that period, which were all more or less affected by the disease. I was my own doctor and saved them all; and, what is more, they all recovered sound, while so many throughout the land that survived at all were more or less worthless ever after.

In 1880 I served on committee of stallions at the State Fair of Kentucky, going from Connecticut for the purpose, and at the greatest stallion exhibition Kentucky had ever made up to that time.

In 1881 I served the New England Agricultural Society as chairman of committee on mares and colts, and all geldings and fillies, at their greatest fair ever held in Worcester, Mass.

Another great compliment of my life was to be told in writing by the President of a Farmer's Institute, in Canada, on the occasion of being invited by the Institute to read a paper on horses before them at their winter meeting of 1886, in the city of Hamilton, Ontario: "But few men in Canada are competent to handle this subject at all, and perhaps no man in Ontario as capable as yourself; and all the executive committee would esteem it a personal favor if you could kindly grant our request."

Again, on the occasion of my reading a well-received paper before the Indiana Horse Breeder's Convention in the city of Indianapolis, in 1893, the "horse papers" spoke of me as a "venerable horseman, well versed in ancient horse history."

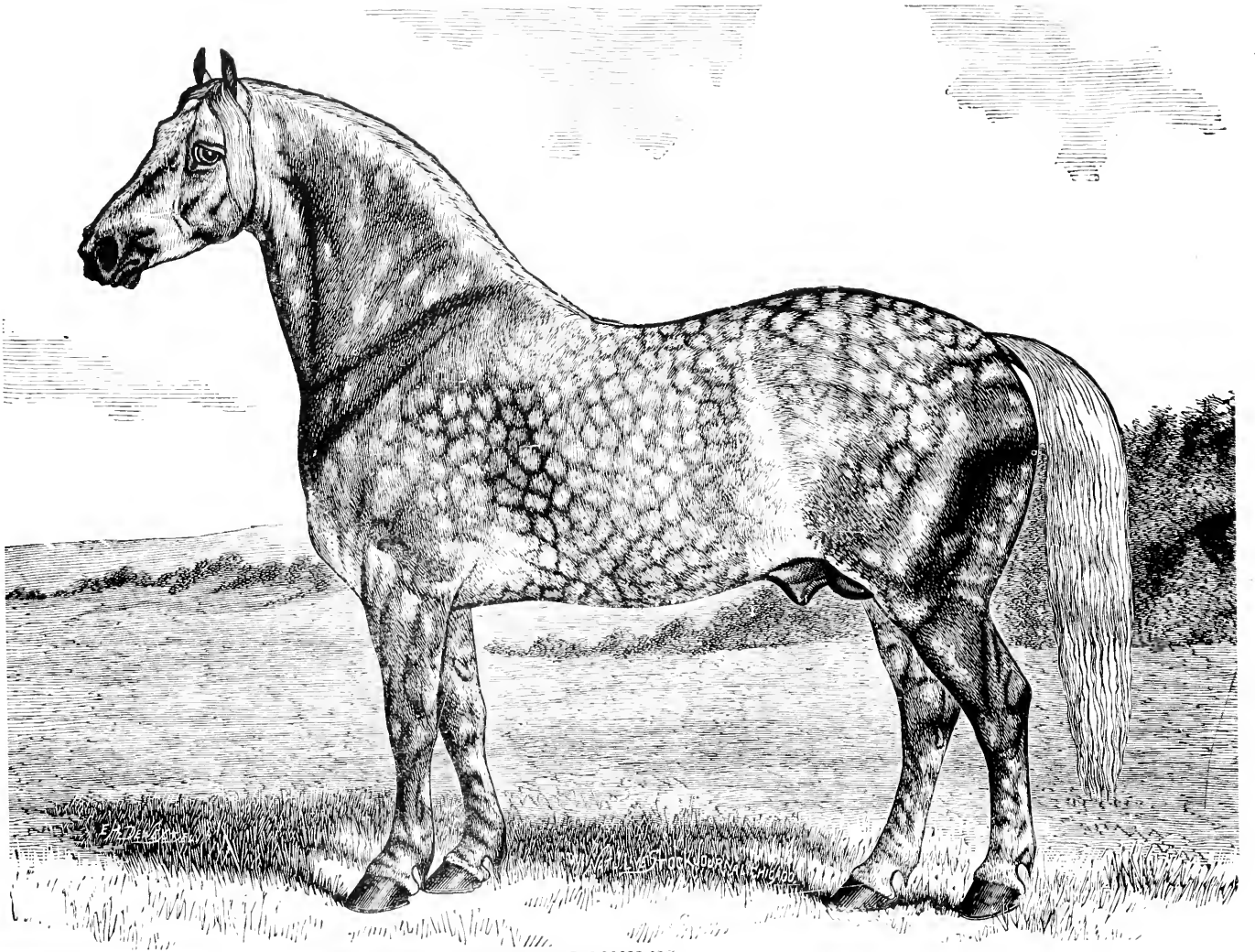
If not as well versed in modern as ancient horse history, it is not for lack of study, observation, and a desire to keep up with the times. I know that proffered knowledge is often offensive, and in horses and horse breeding particularly so; and the man who dares advocate what he knows to be true, but unknown to others, must have strong moral courage with actual knowledge.

THE PLAN OF THE BOOK.

The object of the author in planning this book was to have it so arranged that the breeder, farmer, teamster, liveryman, horse student, and, in fact, anyone desirous of obtaining information of any kind concerning the horse, whether in relation to his breeding and the different breeds, or to feeding, training, shoeing, doctoring, use, and general management, can readily find the information desired so arranged under its proper headings as to be easily come-at-able.

In treating of diseases and their remedies, the author has endeavored to use the English language void of technicalities, and made as plain and easily understood as possible. Perhaps not so plain that "he who runs may read; and the wayfaring man, though a fool, may not err therein," but so plain that the average farmer and the average farmer's son may find and readily understand the desired information sought in relation to any subject connected with the horse from long before his advent into the world on to the time of his death. A horse text-book, in fact, relating to all subjects connected with the horse, from his earliest history down through all ages to the present time.

The horseman's everyday book, which may be profitably consulted every day in the year. The standard authority on horses, embracing all knowledge necessary for the instruction of the breeder, owner, and student, but not entering into racing and race records, except in individual cases, as connected with breeding, and to give the world's fastest records in all ways of going and the fastest trotting and pacing of animals of all ages from one to five years to January 1, 1895.



ROMULUS.

CHAPTER I.

THE HORSE.

Embracing his birthplace — Earliest history — Advent into America — Climatic influence and food — Greek mythology claiming immortality — First horse dealer — Wild horses of America — Origin, habits, etc. — Origin of the Indian pony, bronco, and mustang — Breeds — Skill required in breeding — Classification of breeds.

TO write a history of the horse is like writing the history of kings, and in many instances the history of kings and rulers, in both ancient and modern times, is closely interwoven with that of the horse.

As to the special country that can, by right, claim the proud honor of being the birthplace of this noble animal, we must accept some indirect — though quite reasonable — testimony, fixing Africa as his original home, Africa, alone, being the parent country of the Zebra and Quagga, in many respects his kin; although Egypt is the country in which mention is first made of him some 3,600 years ago.

The earliest monumental records of Egypt which give any clue to the use of the horse are about 1900 years B. C., where he is pictured as drawing chariots used in war. From the writings of early Greek historians it is evident that horses have been used in Greece since about that time, so that we have quite a connected history of the horse for about 3,800 years.

The Bible, being the most ancient, and perhaps the most authentic, of all existing ancient histories, fails to mention the horse until the reign of Pharaoh as King of Egypt. Although in the history of Abraham we find frequent mention of the ass, the camel, of flocks and herds, of oxen and sheep, yet no allusion to the horse is made until the time of Joseph, the

Syrian, who, as Pharaoh's manager in the time of the great Egyptian famine 1707 years B. C., exchanged bread-stuff for horses with the Egyptian cultivators and stock breeders, thus placing himself on record as the first horse dealer in history. At the death of Joseph's father, Jacob, we read that his funeral was attended by both chariots and horsemen. Job's description of the equine monarch upwards of 3,400 years ago is familiar to most of us.

Although man was given "dominion over all beasts of the field" it was only after long acquaintance and trial that the horse was subdued to his will. At first he was only driven before the war chariot; later, he was ridden in battle and appears to have been speedily adopted for use in battle, and since which time, during all these 3,385 years, the war horse has been the right arm of a mighty power on hard contested battle fields of nearly all nations and in nearly all climes. The first account we have of horses being used in war was by one of the Pharaohs, King of Egypt, when he pursued the children of Israel in their escape from Egyptian bondage, with

> "A thousand horse and men to ride,
> With flowing tail and flying mane;
> A thousand horse, the wild, the free,
> All buried in the deep, Red Sea."

This chariot cavalry goes on record as the first in history and with very disastrous results, 1,491 years B. C., or 3,385 years ago.

The shepherd kings of Egypt, whose origin is unknown, introduced him into Lower Egypt, which afterwards became his principal breeding district, from whence he gradually became introduced into Arabia and other Asiatic countries.

The first we know of his advent into the New World, and the first importation into America for stock purposes was by Columbus in 1493—some four hundred years ago—thus placing Columbus on record as the first importer of this animal into this country.

The first horses ever landed in the United States were im-

ported to Florida in 1527 by Cabeza de Vaca, but of this importation — 42 in number — none survived.

The next importation was by De Soto from Spain, and to which importation is doubtless attributed the origin of the wild horse of Texas and the prairies,— a race of horse which are to this day strongly marked with the characteristics of the Spanish blood.

In 1608 the French introduced horses into Canada, where the present race of Canadian horses, though degenerated in size owing to climatic influences, still show sufficiently distinct the blood of the Norman and Brittain breeds.

In 1609 there was a small importation of six horses and one stallion from England to Jamestown, Va., where in 1657 the importance of increasing the stock of this valuable animal became of such recognized importance that an act was passed prohibiting its exportation.

New York received its first importation of horses in 1625, imported from Holland by the Dutch West India Company. They were of the Flanders breed, from which descended the Conestoga horse of Pennsylvania.

In 1629 the plantations of Massachusetts Bay received its first importation of horses from England.

The wild horses of the plains of South America and of the great prairies of North America are undoubtedly descendants of parents turned loose by the Spanish at the abandonment of Buenos Ayres in 1775.

Another opportunity for such an origin was furnished in the "bloody wars" of Mexico and Peru, the issues of which, in many cases, were disastrous to the Spaniards. Consequently, the war horses whose riders were slain could have made a break for liberty, and rapidly propagated their species on the vast, luxuriant plains, so well provided by Nature with food, water, genial climate, and the absence of beasts of prey with power to contend with so formidable an enemy.

De Soto also had a large cavalry in his expedition in which he discovered the Mississippi River and found a grave in

its bosom; and when his men returned home in frail boats built by themselves, they undoubtedly left their horses behind them; thus they too probably became a factor in the production of these once great and mighty herds of wild horses of the plains.

In a state of nature the same uniformity that now characterizes the buffalo, the elk, and the deer families belonged to the horse.

The ponderous English cart horse, the fleet runner, the fast trotter, and the diminutive pony are all descended from the same original type. Climatic influence and food have worked wonders in making the vast difference at present between the Shetland pony, occupying the bleak, barren, and tempestuous isles—lying in the latitude of 59 and 60 degrees—north of Scotland, scanty herbage, and long, cold winters have dwarfed the horses of that country to the most diminutive of all ponies, while from the same originals reared for centuries on the rich and nutritious herbage and grains of, and in the mild climate ten degrees further south on the European coast, we find the immense draft horses of Flanders and Normandy.

While climatic and other influences have done so much to cause the divergence which now exists in races once uniform, selections by man have also been at work, in some cases co-operating with the influences of climate, thereby hastening the transformation in some cases and counteracting it in others.

We have an illustration of this in the horses of Canada. It is quite evident that if the causes that have given us the little, tough pony of the Province of Quebec were continued without interruption for a succession of generations, hastened on by selections of breeding stock with that object constantly in view, we would, in due course of time, have created a race as diminutive in size as the pony of the Shetland Isles.

As has been said: "We find a very striking illustration of divergences from a type singularly uniform in the case of the domestic pigeon, of which there are nearly three hundred

varieties, all more or less distinct, and all descended from one common ancestry, the common wild pigeon."

As my friend Agassiz once remarked at a meeting in 1864:

"There is a tendency in all animal life to adapt itself to the conditions under which it must live, but a change may be so abrupt and complete as to overcome this tendency, and under such condition the race would speedily become extinct, or gradually die out with a few generations of feeble descendants; but under circumstances less sudden and unfavorable a few might survive, being those individuals that from peculiarity of organism suffered less from the change. These, in their turn, would produce the peculiarities of their race modified by the new surrounding conditions. These, again, would produce animals still better adapted to the new order of things, until, in course of time, we should have a race widely differing from the original type created — or evolved — by a 'survival of the fittest,' and remodeled and refashioned by these changed conditions of life."

There is no class of domestic animals in which the effects of climate and food are more apparent than in the horse. Nature's law in the history of the world demonstrates that whenever the horse has existed for centuries on rich and fertile plains and in temperate climates, he becomes distinguished for size and strength; whenever he has been the inhabitant of cold and mountainous regions he becomes diminutive and hardy, if left largely to care for himself. Man may do much by supplying warm stables and abundant food, as well as by selection, to counteract the influence of climate; but in spite of his interference, the tendency will constantly be to adhere to Nature's great law in this respect.

Mountainous regions and rigorous climate will produce the toughest and hardiest races of horses, as has been demonstrated in the New England Morgans and Canadian horses of our own country; while our fertile prairies and luxuriant bottom lands and valleys are by Nature adapted as the home of the heavy draft horse.

The lesson taught by these illustrations is obvious: none of our improved breeds of horses, or other animals, are adapted to all climates or all conditions of life. To be at their best they must each be kept and cared for as nearly as possible under the same conditions, as to food and climate, as when they attained their greatest excellence.

According to Greek mythology, the horse was the gift of gods to men when Neptune struck the earth with his trident; and he was made immortal that he might bear his master company to that land beyond the dividing river.

Congressman John E. Russell of Massachusetts, when Secretary of the Massachusetts State Board of Agriculture in 1886, in a lecture before that body, goes on record as saying that the horse is the only beast that goes to Heaven.

No other animal is, or can be so thoroughly adapted to the wants of man as the horse. For work or for pleasure he is the quick, ready, willing, intelligent, and capable servant of the human race. He enters with cheerfulness into the hardest of labor, carries man's heaviest burdens, hauls his huge loads, breaks up his tough lands, cultivates his crops, markets his produce, etc.; or in administering to our pleasures he is the same unfailing friend.

The business man, the sporting man, and the man of leisure alike go to the horse for their recreation. Entering with the keenest zest into the excitement of the speed ring, he furnishes by far the most popular sport of the age. In the shafts, at the pole, or under the saddle, he gladly rests and refreshes the worried brain-worker, the imprisoned merchant, and the wearied farmer. He is alike subservient to the child and the adult, to the gentler or to the sterner sex, refusing no service which his herculean strength will enable him to perform.

The horse stock of the United States has continued to increase in numbers and value, until now, according to the government tax returns for 1893, they amount to $769,224,799, which, no doubt, means to represent a purchasing power of not less than a cool $1,000,000,000.

WILD HORSES OF AMERICA.

The Wild Horses of America have probably no earlier ancestry in this country than the dates of the Spanish explorers. There seems to have been no horses here before the discovery of Columbus in 1492. There is no evidence that the horse existed in America before Columbus's time, although fossil remains of some early animal of the horse species have been found, but concerning which little appears to have been known. According to generally received authority, Columbus, on his second voyage to this country, brought over a number of horses in order that they might be bred here.

The Spaniards in their later incursions brought over a number of war horses, and De Soto, in his exploits, wherein he discovered the Mississippi River, had a heavy force of cavalry, that, after their leader was drowned and when his followers returned home, were set loose and abandoned to their fate; many of which doubtless survived and were the origin of the Wild Horse of Texas and the Prairies.

Horses thus abandoned by the early discoverers and settlers were, in time, used by the Indians, and to such may be traced the Mustang of to-day, whose habits, in the wild state, were well worth studying, for in some particulars they possessed almost human intelligence.

They chose their own chief, which ruled and governed them in an intelligent manner, giving the signal for change of pasture and of danger from any source. When they find a pasture dried up they take up a line of march for "greener fields and pastures new," the chief taking the lead of the column, and who is the first to throw himself into a ravine, a river, or an unknown wood. If any extraordinary object appears, the chief commands a halt. He then goes to discover what it is, and on his return gives by neigh the signal of confidence, of flight, or of combat. If a fierce enemy presents itself, that cannot be escaped by flight, the herd unite themselves into a circular cluster, all heads turned towards the center where the young animals take refuge. It is seldom that such a

maneuver does not force the bears, tigers, or mountain lions to make a precipitate retreat.

The large herds generally composed of several thousand individuals, divide themselves into many families, each of which is formed of a male and a certain number of mares and foals that follow and obey the male with docility. The chief horse is exclusive sultan, all the mares belong to him by right of force, and woe to the foolhardy one that disputes with him his seraglio and authority; he defies him, fights him, makes him retire, and sometimes makes him pay for his audacity by the loss of his life.

Often the conqueror pardons his foe but might not be so generous could he foresee that his vanquished enemy was only going to wait until age had given him greater force and courage to renew the combat.

Males frequently have fierce contest for the supremacy, and males that have contended unsuccessfully are often driven off to a solitary life. On the appearance of danger, the chief stallion of a small herd seems to direct the movements of all, and even the larger herds — numbering in some instances thousands — seem instinctively to move in concert, so that when they are assailed the stronger animals oppose the enemy and protect the younger and weaker. Even hungry wolves when in packs attack with success only weakened stragglers, and even the jaguar is repelled.

In fighting, horses either raise themselves on their hind feet and bring down their fore feet with great force on the enemy, or, wheeling about, kick violently with the hind feet. The teeth are also used as powerful weapons of warfare.

When the chief becomes old and loses his vigor he then succumbs under the kicks and blows of his rival or dies from misery and shame; and thus, "the survival of the fittest" is continually perpetuated.

Those American Wild Horses known by the name of Mustangs, Bronchos, and Indian Ponies, as has been stated, are direct descendants of the Spanish breed of horses and, un-

doubtedly, of the best horses of Spain at the time of their importation. They have been perpetuated until recently without the intermixture of foreign or new blood. Being left wholly to themselves in a state of nature without the interference of man, they have, despite of all enemies and hardships, held their own as a breed or race, relying wholly on nature's great law of "the survival of the fittest"; and to this day they still retain the color, style, and general characteristics of the Spanish horse, as found in Spain at the present time; although, perhaps, in some instances, and especially so with those occupying the more northern and colder portions of our great West, they are, as a whole, somewhat smaller than the original type of the Spanish horse.

These ponies, as we call them, are, when taken in their wild state, and especially when somewhat up in years, rather hard to break or train for the uses of man, but when properly broken, are, as a rule, willing and faithful servants, and are generally as tough as whitleather.

These ponies have occasionally been crossed with the improved breeds of our American horses with quite satisfactory results.

BREEDS.

What constitutes a breed? A family of animals having a general resemblance in form, size, color or colors, a close affinity in quality of products, a similarity of disposition and habits, and the power to transmit all these so as to reduce the variations to a very narrow minimum.

In the successive steps required to produce a breed the gradations toward perfection are slow and very gradual; there will be many instances of the peculiar qualities of the elementary materials cropping out that are objectionable, and only after the most labored and painstaking selection of the fittest material for further production will the ideal be obtained. Consequently, the work of originating a useful breed is one of time, requiring more patience than most men are willing to bestow upon it; but when they succeed in giving to the world

a new breed in any line that is useful, they are worthy of imperishable remembrance, as large numbers of mankind participate in the advantages derived from their painstaking efforts.

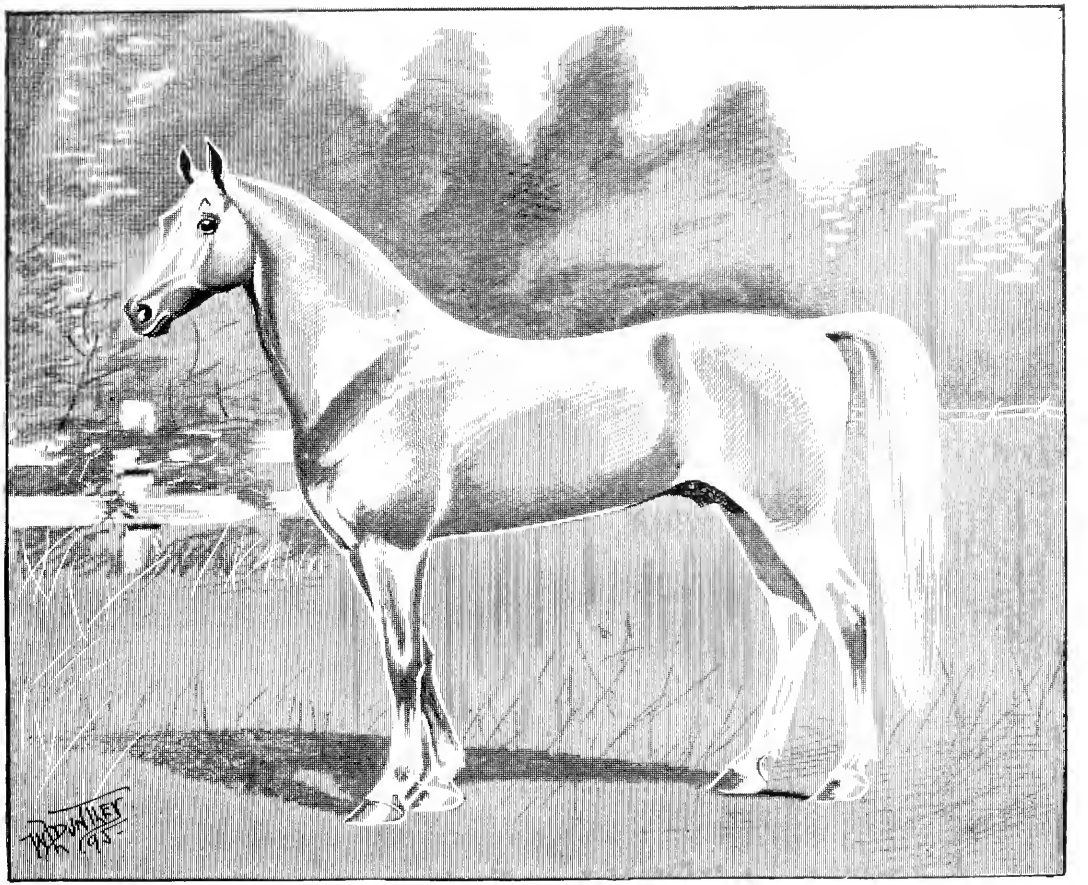
When a fixity of type is obtained, with the corresponding peculiarities, the breed may be said to be established. There are stages when the promoters of a breed are liable to be assailed owing to the incompleteness of their work, and yet they may be on the highway to completion and success.

It requires skill almost amounting to genius to build up any new breed of animals that shall have only the characteristics that are desired. It was said of Bakewell, one of the first great improvers of live stock in Great Britain, that he regarded the animals under his care as wax in his hands, out of which, in due time, he could mould any form he desired to create.

Utility is the grand ultimatum by which the general public will judge of the merits of a breed. The science of horse breeding has developed special horses for special work, and no one breed or class can fill the requirement of the market demands for draft horses, coachers, saddlers, and racing or sporting horses. Hence, all breeds have their own special adaptation of usefulness.

The different breeds of horses recognized and treated of in this book are as follows: Arabian, Thoroughbred, Narragansett Pacer, French Canadian, the American Trotter (composed of several families), — Morgans, Hambletonians, Bashaws, Clays, etc., — French, Coach, Cleveland Bay, Shetland Pony.

Of draft breeds: Percheron, English Draft, and Clydesdale. Making eleven distinct breeds in all.



ISHMAEL PACHA, ARABIAN STALLION.
Imported from Egypt in 1872.

CHAPTER II.

THE ARABIAN HORSE.

Mahomet its founder — Foundation mares for Mahomet's stud — Beautiful points of the Arabian — The Arabian the foundation of the Thoroughbred horse — Arabian blood in the Percheron, Morgan, and Narragansett pacer — Six distinct breeds in Arabia — History of the Lindsey's Arabian — Imported Grand Bashaw — Imported Ishmael Pasha — The Arabian in Kentucky — Difficulty of obtaining good specimens in Arabia.

THE greater portion of Arabia is illy adapted to the raising of good horses, and previous to the days of Mahomet horses were scarcely recognized as a part of the possessions of the Arab, their riches consisting chiefly in camels, oxen, sheep, and goats; but Mahomet was an enthusiastic lover of the horse, and it appears a thorough horseman, and while he succeeded in engrafting upon so large a portion of the Eastern world his own peculiar religious tenets, he also imbued his followers in a great degree with his enthusiastic admiration of the horse. Kindness to and love for this noble animal was made a part of the religious duty of all true followers of this great Oriental prophet.

Mahomet, it appears, was not only a sanguine lover, but a great improver as well, of the horse, thus placing himself on record as the first successful breeder of blood horses in history. From the days of Mahomet down to the present time the Arab has held his stud, and especially his mares, in a sort of superstitious reverence. Mahomet, during his life, had accumulated for himself, by careful selection and breeding, the most magnificent stud in the whole known world; and to this day his followers seek to trace the genealogy of their choicest stock to the mares that were his favorites. There is a tradition

that the prophet, being desirous of selecting mares as a foundation for his stud, had a number of the best of them, which had been used as chargers in battle, kept two days without water. At the end of that time, when mad with thirst, they were set at liberty, and at the moment when they were close to the coveted water his trumpets sounded a war charge, which had such an effect on five of them that they abandoned the water and galloped to the spot where they expected to meet with the still greater excitement of war. These five were therefore selected to form the foundation of his stud, and from them sprang the race called "Kochlani".

The Arabian horse of to-day is endowed with beautiful points and with an accomplished figure and superlative action, surpassing in graceful movement the finest specimens of the equine race. His broad head and massive brain implies intelligence; the eye is full and mild, yet sparkling with excitement when aroused to action. The great hereditary excellence of this fleet and wiry horse is sound feet and legs and the wonderful claims of ability to withstand rest and hunger which surpass the accredited limit of animal endurance. This enables him to endure long journeys across the sandy deserts, where food and water are scarce, sustained alone by his invincible courage.

History points to the Arabian horse as the foundation of the English Thoroughbred race horse, which traces to the Darley Arabian, Godolphin Arabian, etc. To the Arabian horse is also justly accredited the foundation of that most valuable of all breeds for draft purposes where activity and speed in its work is valued, the Percheron. We also find his blood at the fountain-head of what is destined to become the most popular of all breeds of the world — for light harness purposes — the trotting horse of America, which is descended from three great sources or families, and divided and subdivided into several other different families, all branches of which point to the Arabian as their fountain-head; and now when we visit the most noted and celebrated stock farms of the

Western States, and in some sections of Canada, as well, and they have led out for our inspection their beautiful gray Percheron stallions, with their good hard feet and sinewy legs, their broad and intelligent heads, their fine ears and beautiful flowing tails and wavy manes, can we for a moment doubt that they trace their origin directly to this beautiful horse of the desert?

We also find a trace of his blood in the French Canadian horse of to-day, transmitted through his son, the Percheron horse of France. The Arabian horse also stood at the very head of the original pacing family of America, the Narragansett Pacer. (See Narragansett Pacer, Chapter IV.)

It has been proven and established for ages in the old world that the best results have been obtained from Arabian ancestry. The great stronghold of the Arabian stallion is to improve any race or breed of horses with which he comes in contact; and yet we have a breed of runners descended from him that can surpass him in speed over our courses and in our climate. We also have a breed of trotters whose qualities descend from the Arabian, that, with our American breeding and training, can far surpass him in speed at that gait; and, also, the Percherons can out-draw him, yet, I claim that the best qualities of all of these came directly from the Arabian horse.

The first Arabian stallion that gave the oriental character to the English horse was the Darley Arabian, so called from the fact of his having been purchased at Aleppo by an English merchant by the name of Darley. He was said to be of the desert breed although his precise lineage was never determined. He sired Flying Childers, a celebrated race horse so far superior to anything that had appeared in England that he created a great sensation and his exploits passed into history and gained a world renown and crowned his sire as monarch of the stud, by his wonderful speed and endurance.

The pure Arabian is celebrated less for unrivalled swiftness than for extraordinary powers of endurance. Its usual paces, as used in Arabia, are but two — a quick walk, often averaging

four or five miles an hour, and a half running canter; for only when pursued does a Bedouin put his horse to full speed. It is the distance they will travel in emergency, the weight they will carry, and the comparative trifle of food they require, which renders the Arabian horse so valuable, especially so to the Arabs, in their land of stony mountains and sandy deserts.

The rocky mountains and sunny valleys that temper the dry air of the deserts are supposed to have an influence upon the quality of bone and muscle, giving sound feet and legs to stand great speed and endurance. The Arabian horse, as improved and perfected by this first great artist in that line, Mahomet, at the time of his death, was justly considered the primitive blood horse and the type horse of the world. There are in Arabia to-day, according to Ali Bey (an Arabian writer, who has had opportunities beyond the reach of ordinary writers), six distinct breeds of Arabs.

"The first," he says, "named the Dgelfe, is found in Arabia Felix; they are rare in Damascus but pretty common in the neighborhood of Anaze. They are remarkable for speed and fire, yet mild as lambs; they support hunger and thirst for a long time, and are of lofty stature, etc. A colt of this breed, at two years old, will cost in his own country 2,000 piasters.

"The second breed, called 'Seclaoni,' comes from the eastern part of the desert and resembles the Dgelfe of Anaze in appearance, but is not quite so highly valued.

"Next comes the 'Mefki,' handsome, but not so swift as the two former-named breeds, and more resembling the Andalusian in figure. They are very common about Damascus.

"Then the 'Sabi' resembles the Mefki; and the fifth breed, called 'Fridi,' is very common but it is necessary to try them well for they are often vicious and do not possess the excellent qualities of the other breeds.

"Sixth, comes 'Nejdi,' from the neighborhood of Bussorah, and if they do not surpass they at least equal the Dgelfe of Anaze and Seclaoni. Horses of this breed are little known at

Damascus, and connoisseurs assert that they are incomparable; thus, their value is arbitrary and always exceeds 2,000 piasters."

This writer fails to make mention of "Kochlani," descended from the stud of Mahomet, who laid the foundation of Arabian pedigrees, but he undoubtedly used Seclaoni instead of Kochlani in his description of the different families of this breed.

It is asserted by oriental travelers that pedigrees exist that can be traced 500 years back and in the highest breeds there is no doubt of that; at present great care is taken and many ceremonies are performed at the covering of the mare. After the birth of the foal a certificate is always made out by the local authority and this must be done within seven days of its being dropped.

The Arabian horse-breeder estimates the value of a horse by its breeding, and is very particular in his choice of a stallion, preferring to leave his mares unproductive rather than breed them to a common horse, and often travels many miles to find his ideal of a stallion; the owners of the best stallions, on the other hand, being quite as particular regarding the quality of the mare presented for service.

It is said that the Bedouins, when a horse is born, never allow it to drop to the ground, but receive and keep it for several hours upon their arms, washing it, stretching and strengthening its limbs, and hugging it like a baby.

One of the most important of the earlier importations of the Arabian to America was that of the Lindsey Arabian imported to Connecticut about 1768. He has a remarkable history, as follows:

In about 1767, for some important service rendered by the commander of a British frigate to a son of the Emperor of Morocco, the emperor presented this horse (the most valuable of his stud), to this captain, who shipped him on board the frigate with the sanguine expectation of obtaining a great price for him if safely landed in England; but on the return voyage the frigate called at one of the West India Islands, where, being obliged to

remain some time, the captain, in compassion to the horse, landed him for the purpose of exercise. No convenient, securely enclosed place could be found but a large lumber yard, into which the horse was turned loose; but, being young and as playful as a kitten, he clambered to the top of a huge pile of lumber, from which, and with it, he fell, breaking three of his legs.

At this time, in the same port, the English captain met an old acquaintance from New London, Conn., U. S. A. To him he offered the horse as an animal of estimable value could he but be cured. This Connecticut captain gladly accepted the horse and knowing that he must be detained for some time at the Island before he could dispose of his assorted cargo, got the horse on board his vessel, secured him in a sling, very carefully set and bound up his broken legs, and, when he landed at his Connecticut port, the horse was able to walk from New London to Pomfret, Conn., which place became his home for several years; and such was the character and value of his colts that his service became in great demand, and during the War of the Revolution the Connecticut cavalry of beautiful, active horses attracted the attention of Generals Washington and Lee to such an extent that they enquired into their breeding, and found them to be the sons and daughters of this Arabian horse "Ranger," as he was called.

After the close of the War of the Revolution, and about the year 1784 or 1785, Generals Washington and Lee sent Captain Linsley to Pomfret, Conn., to see this wonderful sire of cavalry horses, and, if as represented (and if he could be purchased), to bring him back with him to Virginia. Captain Linsley found this horse in Pomfret to be owned by a man named Sabin, who consented to sell him for $1,000; consequently he was taken to Virginia and his name changed from "Ranger" to "Linsley's Arabian." He was then about twenty years old. He stood for several years in Virginia, covering mares at high prices and sired some very good ones there, among which were Tulip and many other noted runners of that day.

I have dwelt more on the history of this Arabian horse than I should have done did I not feel assured beyond a doubt that he was the maternal grandsire of that most celebrated of all American horses of his day, Justin Morgan.

When news came to General Putnam of Pomfret, Conn., that the British had fired upon Concord and that his immediate presence was needed at Boston, the messenger found the "old hero" plowing with an ox team, but in his barn was stabled a beautiful daughter of this great sire of cavalry horses, which "old Put" saddled and rode to Boston that same afternoon, some 65 miles, and which rendered him such signal service during that great and memorable battle of Bunker Hill on the 17th day of June, 1775.

An important importation to America of an Arabian sire was in 1820, when "Grand Bashaw" was imported from Tripoli by Joseph C. Morgan, of Philadelphia. Some of our fastest trotters have descended from him, and much in the improvement and merit of our American-bred horses of the present time may, perhaps, be justly attributed to him, as he was in stud service here for more than twenty years. He was the founder of the Bashaw family and the fountain head of the Clay branch of the Bashaw family of the American trotter of to-day.

One of the most beautiful horses I ever saw was an Arabian stallion imported from Egypt by Col. Wm. H. Jenifer, in 1872, "Ishmael Pacha," but more generally known as the "Jenifer Arabian."

I saw several of his half-blood colts and fillies, which were all very thrifty and large for their age. In color, this horse was a beautiful gray and stood rather less than fifteen hands high, but his progeny, as I saw them, were mostly chestnuts and some of the two-year-olds were taller than their sire.

I had much correspondence with the importer concerning this horse, and traveled from Connecticut to Pennsylvania to see him; and after the death of Col. Jenifer I came very near

purchasing him of his administrator, for my stock farm, at that time in Pomfret, Conn., for $1,000.

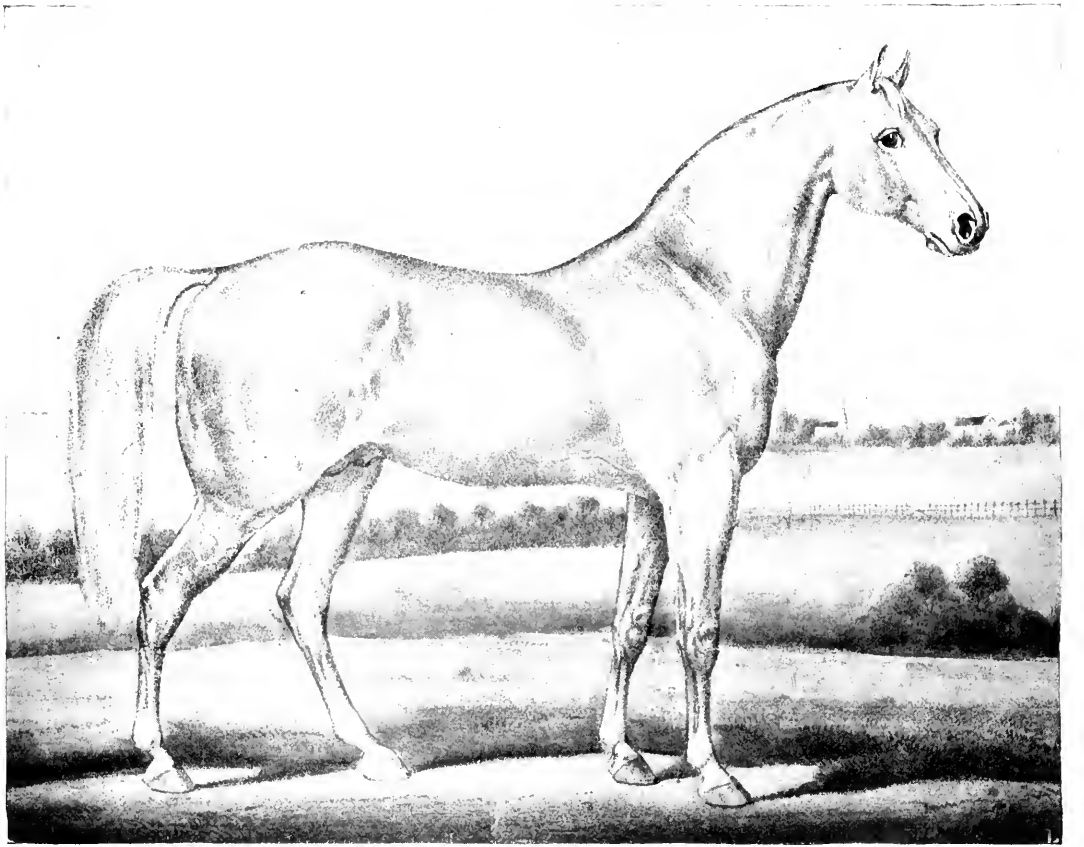
All who have raised colts from common mares sired by Arabian stallions, are, I believe, unanimous in opinion that their get is generally even tempered, of a mild, willing, and quiet disposition, easily and cheaply raised, early maturing and fit for service at three years old.

The prevailing color of the best-bred families of Arabian horses is gray.

I know of but one attempt to breed the Arabian horse in its purity in this country, as Arabians, and that was made by A. Keen Richards of Kentucky, who visited the Arabian deserts himself several times for the purpose of studying the Arabian horse at home, and brought out to Kentucky, at different times, several of as good specimens as was possible for him to secure in Arabia. The Arabs are very loth to part with their best ones, and especially so of their mares. War and misfortune interfered with Mr. Richards' plans to that extent that he could not or did not accomplish his long-cherished and desired object.

In a personal interview with Mr. Richards on this subject at Lexington, Ky., in 1880, I found him still sanguine in the belief that the Arabs could not only be bred in central Kentucky without deteriorating in any particular from those bred in Arabia, but that in many points, with generous food and good care, they would improve. And he also believed that the thoroughbred race horse of that time could be improved by judiciously crossing with the Arabs; and the trotting bred horses of Kentucky as well. His faith in the Arabian horse as the improver of other breeds was stronger than that of any other gentleman with whom I have ever conversed on this subject; in fact, he knew more about them than any one else I ever met. He had been there.

In this interview with Mr. Richards, in speaking of General Grant's then late present of the two stallions — Lepold and Linden Tree — presented by the Sultan of Turkey, Mr. Rich-



IMPORTED MESSENGER.

The great progenitor of trotters in America; foaled in 1785; imported 1792; died 1808.

ards said he considered them both inferior specimens, coming far short in style and quality of the best specimens of this breed as he found them at home.

It is exceedingly difficult and expensive to obtain good specimens; it is with great difficulty that the Sultan, even, obtains pure Arabs of the best families.

In 1891, Thomas W. Palmer, a Detroit, Mich., capitalist, conceived the idea of importing Arabian horses for the purpose of infusing new blood in his Percheron stud; consequently he sent a trusted agent to Damascus for the purpose of obtaining some of the best specimens of that country for this purpose, but the difficulty, amounting, it is said, to impossibility of obtaining what he desired, compelled him to abandon his project.

And now, when it is announced through our daily papers that the Arab horses shown at the Midway Plaisance, connected with the World's Fair of 1893, were an exhibit of the Turkish government, and by that government permitted to be sold by the sheriff, it is too ridiculous; yet it may be believed by the masses, "because in the papers." In after years some of the descendants of this motley collection may lay claim to royalty.

CHAPTER III.

THE THOROUGHBRED HORSE.

The oldest and best established breed in America and Europe — Breed built on an Arabian and Barb foundation — The Darley Arabian — Imported Messenger — Imported Diomed — Imported Trustee — Lexington — Influence of the blood in America.

THIS is the oldest and best established of all the breeds of America and Europe. The Thoroughbred horse is peculiarly a British production. At a very early period the attention of the rulers of Great Britain was earnestly directed to the work of improving the breeds of horses in that kingdom.

It appears from history that their foundation stock was notoriously deficient in size, and that their earliest efforts were directed to remedy this defect by the importation of heavy horses from Normandy, Flanders, and Germany. Then, to give gracefulness of motion and beauty of form, they introduced what was known as Oriental blood, that of the Arab, the Turk, and the Barb.

For several years preceding the reign of Charles II, horse-racing appears to have been rapidly gaining in favor as an amusement and recreation among the English people, and from that time until the present, contests for supremacy upon the turf have stirred the British heart as no other amusement has ever done. To the constant growth and great popularity of this sport, which for nearly 200 years has been regarded as the national amusement of that country, are we indebted for a persistence in a course of breeding that has given us the thoroughbred race horse of to-day, so prominently distinguished throughout the world for speed and endurance upon the race-course; and which, on account of the great care in breeding,

and its consequent purity of lineage, were the first race of animals to which the term "thoroughbred" was applied.

In the later years of the reign of Queen Anne an Arabian horse was brought to England, purchased at Aleppo by a Yorkshire merchant named Darley, and was supposed to be of the Kochlani breed, although his precise lineage was never established. He was called The Darley Arabian. He sired Flying Childers in 1714, who proved to be the fastest horse that had ever been on the English turf, and was of noble form and matchless courage.

Another descendant of The Darley Arabian was Eclipse, foaled 1764, during the eclipse of that year, hence his name. He was thick-winded and a blower, but never met his match on the turf, and after racing seventeen months and winning £25,000, was retired to the stud, as no horse in the known world dared race with him. He sired 334 winners that won in races £160,000, besides numerous cups and plates. He died in 1789, aged twenty-five years, and was buried at Whitechurch, between Harrow-on-the-Hill and Ware, in Hertfordshire, and it is added that at his interment ale and cakes were given to those present.

Another great factor in the improvement of the English blood-horse was the Godolphin Arabian, foaled about the year 1724. He was presented to Lord Godolphin, from whom he took his name. He sired Laih, who proved to be the fastest horse (Childers excepted) ever on the English turf at that time. The Godolphin was one of the sources of great improvement to the English race-horse of that period.

The "Royal" mares of that time were mostly imported Barbs.

Of all Oriental sires it is generally admitted that the Godolphin Arabian — imported 110 years ago — is the last importation of foreign blood that has proven of any benefit to the thoroughbred horse of England, and while this blending of the Oriental blood with the old races of England furnished the foundation, there can be no doubt that the care and skill of the

English breeder in selecting and coupling with the best and fastest for generations on generations, have accomplished more in establishing this breed as it now exists, than could possibly have been done by continuing the out-crosses of foreign blood, and that the time is long since past when the intermingling of any other blood would not prove a detriment.

The thoroughbred horse, as now bred, is generally considered far superior to any branch of the Oriental horse of to-day in speed, size, and substance. Our American horses are largely composed of the blood of the thoroughbred; many of the best stallions and mares of England have been imported to this country, and their influence is seen on every hand. It enters largely into the groundwork of all our trotting strains, and it is doubtful if a single great road horse or trotter has been produced in this country that did not possess a share of this royal blood (or its source, the Arabian) as a foundation upon which the trotting superstructure has been built. There exists great ignorance, even among many who are considered intelligent and well-informed horsemen, as to what constitutes a thoroughbred horse.

The compiler of the "Thoroughbred Stud Book" in this country admits to registry as thoroughbred all animals that show an unmixed descent of five generations of pure blood.

Among the most noted early importations of thoroughbred horses from England to this country, and contributing mostly to the quality and speed of American horses, may be found the names of Janus, foaled in 1746, a grandson of the Godolphin, the good qualities of whose stock are said to be perpetuated to this day.

Imported Traveler, foaled in 1747, and tracing in an unbroken line to the White Turk and to Layton's Barb mare, was also considered second to none in his time. He belongs to the earlier importations, and is still one of the most valuable landmarks in old pedigrees, and especially so as the founder of that once most popular of all breeds in America for all purposes,— the Morgan.

Wild Air, foaled in 1753, imported to New York by Mr. DeLancy, and on account of the great value of his stock was taken back to England, was undoubtedly a great improver of American horses, and one of the paternal ancestors of Justin Morgan, founder of that greatest of American general purpose horse, the Morgan. (See Morgan Horses, Chapter VI.)

Fearnaught, imported in 1764, a great-grandson of the Darley Arabian, stood for service in this country for twelve years and left a numerous progeny of highly distinguished horses of that time.

Messenger, foaled in 1785, was imported to Pennsylvania in 1792, and died in New York State in 1808. He distinguished himself as being the progenitor of horses from half-bred and cold-blooded mares of good trotting action and staying qualities, and whose influence in the trotting horse of America is still highly recognized, and from whose loins on the paternal side, descended Rysdyk's Hambletonian.

We find an old advertisement of this horse,—the last,—dated April, 1807 (eighty-eight years ago and one year before his death), which reads as follows:

"THE CELEBRATED HORSE MESSENGER.

"Old Messenger (commonly so called) is allowed by the best judges to be in as good order, feel as well, and to retain his faculties in as much vigor as at any time since he was imported.

"Messenger is a full-blood racer, fifteen hands three inches high, and well proportioned. He was bred by John Pratt, Esq., of Newmarket, and was got by Mambrino, who covered at twenty-six guineas a mare in the year 1784. Mambrino was got by Engineer, who was got by Sampson, who was the sire of Bay Moulton and several other capital racers; his dam by Turf, his granddam by Regulus.

"The mare was sister to Figurante and was dam of Leviathan, an excellent racer. He is a sure foal-getter and his stock equal, if not superior, to that of any horse in the States, some of whom are selling from $500 to $2,000 each.

"The horse will stand at Bishop Underhill's in the County of West Chester, fifteen miles from Harlem on the White Plains Road, to cover the ensuing season at $15 the season and $10 single service; the season to commence on the first day of April, and to continue not longer than the first day of August following; the money to be paid at the time of taking away the mare.

"Warranted foals by agreement.

"PERFORMANCES.

"Messenger won the following sums in the years 1783, 1784, and 1785, as may be seen by the racing calendars. In September he beat, at Newmarket, Mr. Potter's Colchester, by Shark, for 100 guineas. October 30, 1783, he beat Mr. Napier's horse Specter across the Flat for 300 guineas, and Mr. Fox's horse Pynhus across the New Flat for 150 guineas.

"In May, 1784, he beat Lord Barrington's Tiger for twenty-five guineas; in July, 1784, he beat Mr. Windham's horse Apothecary for 200 guineas; Lord Foley's Rodney, Mr. Westell's Snowdrop, and Mr. Clark's Flower for sixty guineas, and Lord Foley's Ulysses for 100 guineas. In March, 1785, he beat His Royal Highness the Prince of Wales' Ulysses for 200 guineas, and Mr. Windham's horse Fortitude for 300 guineas.

"In April, 1785, he beat Lord Sherburn's horse Taylor for fifty guineas. In addition to the above he has won the King's plate, and is the only horse on the continent said to have done the same.

(Signed)

"BISHOP UNDERHILL."

Florizal, imported into Maryland in 1794, was a good stock horse and some of the best of our Southern horses of to-day trace to him.

Diomed, foaled in 1777 in England, and imported into Virginia in 1799, when twenty-two years old, was a most remarkable stock horse, and his influence as such is felt in America to-day. He was the sire—in America—of the great Sir Archy, a very distinguished horse of his day and justly called the Godolphin Arabian of America. He was a brown horse, sixteeen and one-half hands high, of great substance, and left an exceeding numerous and very valuable progeny at his death when twenty-eight years old.

Trustee, foaled in 1829, contributed his full share, probably, in the improvement of the American horses of his time, both as regards speed and quality.

Priam was also among the best; so of many of the later importations, among which may be recounted Glencoe, the great horse of the two continents, brought from England to Alabama in 1836, and considered one of the best the world had then produced, and his descendants are not to be despised to-day.

America, herself, has contributed to the breeding ranks of thoroughbred sires some very noted animals, among which may be found a Boston c. h., deriving his name from a popular game of cards at that time, who was a great race horse himself and a sire of the great Lexington, foaled in 1850, bred by Dr. Warfield of Lexington, Ky. He first ran on the turf under the name of Darley and was a winner; was then purchased by Mr. Richard Tea Broeck, who changed his name to Lexington. He ran many successful races, winning for his owner many thousand dollars; and after breaking down as a racer was purchased by Mr. Robert A. Alexander of Kentucky, proprietor of Woodburn, for stock purposes, for $15,000.

Mr. Alexander's friends ridiculed his paying such a price for a broken-down stallion, useless for the race course and untried in the stud; the far-seeing Kentuckian replied that the day would come when he would sell one of the produce of the horse they then despised for more money than he had paid for the sire.

That day did come, for after his son, Norfolk, had won the two three-year-old stakes at St. Louis in 1864, on Mr. Theodore Winter asking Mr. Alexander to name the price for the colt, he replied "$15,001." That sum was immediately given and Mr. Alexander's prophecy verified.

Lexington proved himself America's greatest sire and was the sire of Idlewild, Kentucky, Asteroid, Harry of the West, Jack Malone, Lightning, Lancaster, Daniel Boone, Bayonet, Vauxhall, Judge Curtis, Stonewall Jackson, Kingfisher, Harry Bassett, Tom Bowling, and others of note both on the race course and in the stud.

THE VALUE OF THOROUGHBRED STALLIONS.

As regards the estimate in which the race-loving Englishman holds his best bred racing stallions may be approximated from the following table of prices for which a number of prominent thoroughbred stallions have been sold:

Ormonde,	$150,000	Galore,	$30,000
St. Blaise,	100,000	Bonnie Scotland,	30,000
Don Castor,	70,000	Don Alonzo,	30,000
Blair Athol,	62,000	Kingston,	30,000
Kentucky,	40,000	Dew Drop,	29,500
Vern,	39,000	Potomac,	25,000
King Thomas,	38,000	Dobbins,	22,000
Gladiator,	35,000	Cantineer,	20,500
Iroquois,	34,000	Luke Blackburn,	20,000
Tournament,	33,000	Duke of Magenta,	20,000
Rayon de Orr,	33,000	Mortimer,	20,000
The Earl,	30,500	Ban Fox,	20,000
G. W. Johnson,	30,000	Louisburg,	20,000
San Domingo,	30,000		

The yearling colt, King Thomas, sold at auction in the city of New York in 1887 for the magnificent sum of $38,000 cash.

Mr. Saville refused $75,000 for Cremona, and the Marquis of Westminster refused $17,500 for Touchstone, accompanying his refusal with the remark that he would not exchange him for a German principality.

A party of Americans visiting England several years since, after looking over the Eton stud, requested an interview with the owner, Lord Westminster. The spokesman began by saying that he and his friends had seen the horses and that they fancied Touchstone very much, very much indeed. Lord Westminster was highly pleased to hear him say so.

The American, in continuation, informed his Lordship that they had made up their minds to buy him.

"Oh, indeed!"

"Yes, my Lord, that's our determination; what's his price?"

"The American Domains," was the reply.

Priam, imported into Virginia in 1837 at a cost of $17,500, which was the largest price ever paid for a horse to that date in England, after the appearance of his daughter, Crucifix, in 1840, when she won the 1,000 guineas, the 2,000 guineas and the Oaks, $50,000 was offered and refused for him to return to England.

The English breeder is always ready to pay more for the

use of a highly bred animal than any other in the world, and, as a consequence, the civilized world is still tributary in a measure to that little Island for improved live stock.

This is especially so in horses. The service fee paid for thoroughbred stallions of the first rank would scare an American breeder.

Hermit, regarded as the most successful thoroughbred sire of his day, was held at 250 guineas, nearly $1,300.

Isonomy's fee, 200 guineas, Galopin's 100 guineas.

Undoubtedly a large number of the foals sired by these horses are never worth the service fees; but when a winner is struck he makes amends for all former losses.

CHAPTER IV.

THE NARRAGANSETT PACER.

The origin, rise, and progress of the breed — Daniel Pearce and his stallion Rambler — Imp. Rambler — Narragansett blood in the Morgans — Little Neck Beach, R. I. — Mary Langworthy Southcote.

THE origin, rise, progress, and we might almost say extermination of this once most noted family of the equine race in this country seems to be somewhat shrouded in mystery by the horse oracles of the present day; yet to me, its history having been verbally handed down from father to son as an heirloom of our family for the past 175 years or so, is very clear. Its origin is as follows:

In the reign of Queen Anne, A. D. 1707, a young man of the county of York, East Riding District, England, by the name of Daniel Pearce — the son of a well-to-do tenant farmer — a natural born horseman and the possessor in his own right of a beautiful young chestnut stallion, a grandson of the great imported Arabian horse, the "Darley Arabian," then owned and kept by the Lord of the Manor — Lord Darley — (very foolishly it was thought) fell desperately in love with a charming young lady by the name of Mary Langworthy Southcote, who belonged to an old and wealthy family living in Hull.

As a matter of course in that age of aristocracy, such a thing as a tenant farmer's son (however worthy he might be) to think of marrying into an old family like the Southcotes, was preposterous. Consequently this young man, Daniel Pearce, in order to become weaned from his Mary, decided to bid England a long farewell, giving up the comforts of home, the endearing scenes of childhood, the companions of youth, and all — no, he could not give up his beautiful colt, his own "Rambler." He would leave merry England and all else, save

Rambler, behind; with him he would take the first vessel sailing from Hull to America. Rambler should bear him company to the New Eldorado, or they would both share one common grave in the bosom of the Atlantic.

The result of this decision was that after a somewhat long, dreary, and perilous voyage in a sail vessel of those times, our hero, with his companion, was landed in Newport, R. I. His final destination being Kingstown, a country bordering on the west shore of Narragansett bay, he took passage in a sail boat from Newport to the Narragansett country, still accompanied by his horse Rambler. During the voyage, and somewhere about midway, it is said, between Beavertail, on Canonicot Island, and Narragansett Beach (now Narragansett Pier), the boat capsized and the horse swam for the shore, some three miles, and several days afterwards was found in the woods on what is now called Boston Neck. Hence the legend by some that the paternal ancestor of this race of horses was found swimming at sea; and by others that he was found running wild in the woods in the Narragansett country.

Upon arriving in this new and wild country our young Englishman found, to his mortification and annoyance, that, although possessed of one of the finest and best "galloping saddlers" in England, the new country afforded no roads suitable to ride upon; instead of roads were to be found but Indian trails and bridle paths and even these were handicapped with rocks and stones. These circumstances compelled Daniel to change the gait of Rambler from a gallop to a pace or "rack" as it was then called, which he easily acquired.

This stallion was kept as a stock horse for many years by his owner and importer, and was, for those times, very generally patronized, especially throughout the southern and southwestern counties of Rhode Island and the district of Stonington, Conn.

He became the paternal progenitor of a race of pacers; it is said that his colts all paced from the start, and that his sons begat pacers, and when his daughters were bred to pacing sires

their progeny invariably paced, but when bred to trotting or running sires they either trotted or ran, as the case might be.

The Narragansett Pacer soon became an established breed in Rhode Island, and as the people of those times had neither carriage roads or carriages, or steam cars, what traveling was done was either accomplished on foot or on horseback, and men frequently rode from fifty to sixty miles per day on one of those beautiful, easy-going saddlers, over hills and through dales, following the rough and stony bridle paths of New England at that period of its history.

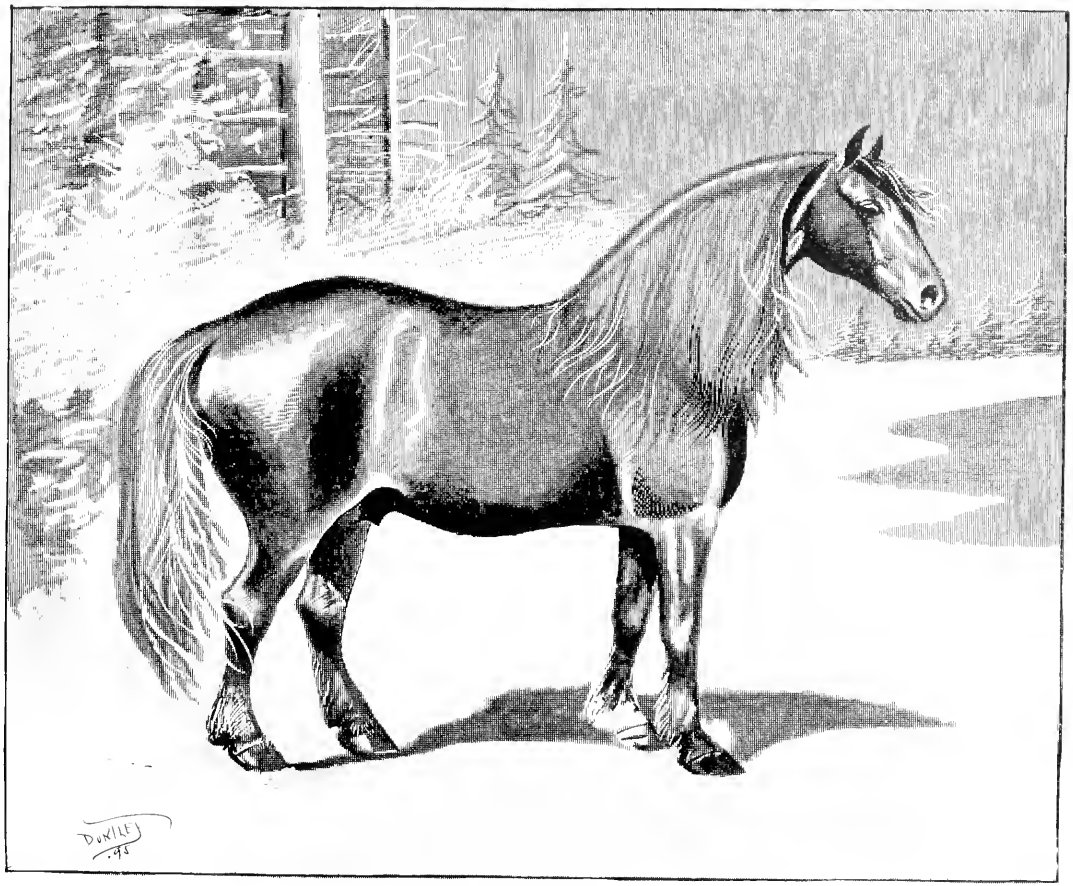
These horses were said to be remarkably sure footed. The pure bloods (as they were called) could not be made to trot at all. They used them in races as long ago as 1720. Little Neck Beach, on the Narragansett shore in South Kingston, one mile in length, was used as a race-course.

In about the year 1725 they came to be looked upon as an established breed, and from that time until 1760 were in active demand for export to Cuba as saddlers, and were sent for at much trouble and expense by some breeders who were choice in their selections.

A chestnut mare of this breed having been taken to Vermont, U. S., in 1807, and bred to that most wonderful horse, Justin Morgan, the result was his most celebrated son, Sherman Morgan, foaled in 1809, who took the trotting gait of his sire and the color and beauty of his dam.

Such finally became the demand for these horses for export that the breeders "killed the goose that laid the golden egg" by disposing of not only their surplus but most of their breeding stock, as well.

By this time, however, the country having been supplied with better roads and the people with carriages, the saddle horse was less sought for at home, and horses that could trot became more popular and in better demand than those of the pacing gait, and horses of this breed were then trained to trot in harness and pace under the saddle. I can well remember descendants of this breed of horses, crossed with other breeds,



LA CANADIENNE.
Type of the original Canadian horse as bred fifty years ago.

perhaps, that would pace all day under the saddle, and others that would both trot and pace, frequently changing from one gait to the other.

This breed of horses goes into history as the only one founded on the results of a single importation and becoming in demand for export within twenty years after the importation of its founder.

I still recollect descendants of this breed that were great roadsters and tough as leather. I recall to mind two black mares, both raised and owned in Kingston, Rhode Island,—one by George Allen and the other by Nathaniel Reynolds—that would go from Quidnessett, near Wickford, R. I., to Brighton, Mass., about sixty miles, in a half day without stopping on the the road for feeding.

I once owned a sorrel gelding, a descendant of this breed, that paced and would not trot at all, but would pace, if put to it, I think nearly, or quite, one hundred miles in a day on a good road.

In conclusion of this scrap of history, allow me to state that Daniel's Mary "forsook father and mother, brothers and sisters," home, luxuries, society, and all the pleasures that wealth and civilization could bestow, and followed her lover to America, where they were married and became the founder of a family by the name of Pearce in America (one member of which has served the people of the United States one term as its President), besides figuring largely in other prominent American families by intermarriage. Mary was disinherited, however, and when her father made his will she was "not in it."

CHAPTER V.

THE FRENCH CANADIAN HORSE.

Early imported into Canada from France — Climatic influence on Canadian horses — Hardiness and utility — Canadian blood in the American trotter and pacer — Noted Canada horses imported to the United States — Surry, dam of Henry Clay, a Canadian.

THE early settlers of Canada came from France, bringing their horses with them. France, like England, contains several breeds of horses, of which the most desirable are from Normandy; at least that was the case years ago before the advent of the Percheron.

As the first settlers of this country needed horses and the horses must be brought from France, their mother country, and as the distance was too long and freights too high to attempt importing any but the best, it is presumed that of such were their early importations.

It may safely be inferred that in those days the Norman or Percheron horse of France was far inferior in all respects to the Percheron horse of that country to-day, after having been improved with the blood of the Arabian.

These French horses were brought over into lower Canada in the early settlement of the colony, and for many years formed the principal horse stock of Canada. The rigor of the climate and the scarcity of fare materially reduced their size from that of their French ancestors; still, they retain to this day the same strong make-up and general characteristics that render them distinguishable from any and all other breeds. They constitute a race of easy-keeping, sound-constitutioned, and long-lived horses. From their strong, compact form they can command their strength to great advantage, and there is nothing in the shape of horseflesh to-day that can stand the

wear and tear of the French Canadian pony, except it be an old-time Morgan of about the same size and much the same style.

The French Canadians have but few equals in all the improved breeds of horses as a general purpose horse. Nothing really excels a pair of these Canadians as a team for all purposes of general use for Canadian farming, when cost of keep is taken into account.

They have also done more to establish the trotting horse of America than they have ever received credit for. The crossing of this breed with others in the United States, on account of their hardiness and sound constitution, has in many instances been of material advantage.

For instance: One of the French Canadians — a pacer — called Pilot was the sire of Alexander's Pilot, Jr., the founder of a family of trotters and the sire of the dam of Maud S., one of the fastest and gamest trotters of the world, and who for so long held the world's record as such. He was also the sire of many noted trotters. This old Canadian horse, Pilot, went from Canada to Kentucky and numbers among his descendants Bonesetter, Pilot Temple, Tattler, and Tackey, who owed much of their great speed and staying qualities to him.

Alexander's Norman was also sired by a half-bred French horse, the Morse horse. He was the sire of Lulu, 2.15. Red Jim, the fastest three-year-old of his time, inherited the blood of Norman; and Blackwood, the fastest three-year-old of his day, was a son of Norman.

Davy Crockett, another French pacer, was the progenitor of Legal Tender, Red Cloud, Red Cross, and other good ones of their day. Copper Bottom, also a French pacer, did much to improve the trotting stock of Kentucky.

Columbus was a pacer taken from Canada to the United States and converted into a trotter; he was the sire of Smith's Young Columbus, that crossed so well with the Morgans and other New England horses.

A black mare called Kate, bred in Canada and sired by a

French Canadian stallion, dropped five colts to Hambletonian, all of whom trotted better than 2.30, and three of which are on record.

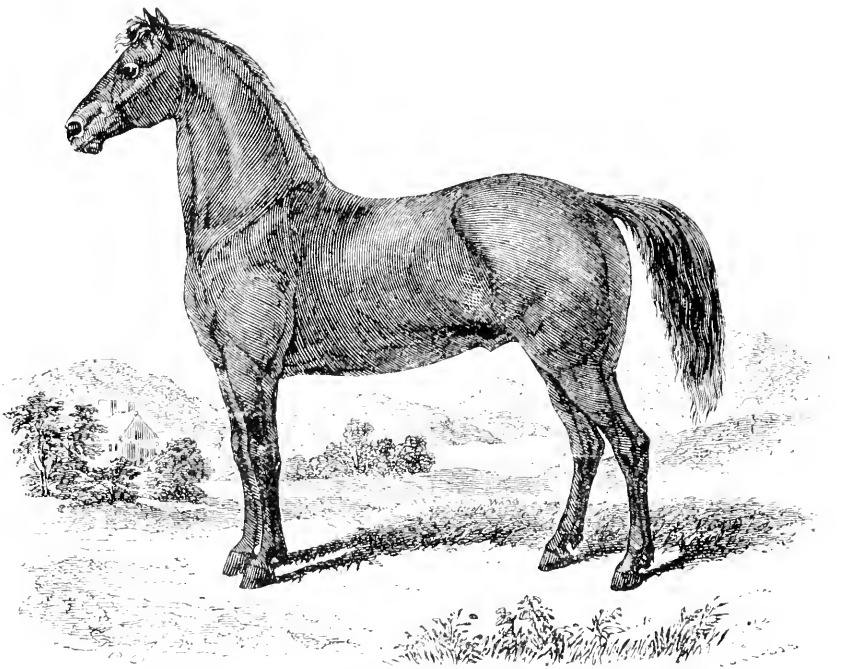
Surry, dam of the world-renowned Henry Clay, the founder of the Clay family, and the maternal ancestor of those old-time whalebone trotters, George M. Patchen, Lucy, and American Girl, was a Canadian. George M. Patchen was the founder of the Patchen branch of the Clay family of American trotters.

Gift, one of the most promising colts of Mambrino Pilot, was out of a French pacing mare. Mambrino Gift had a French cross, as did his grandsire and his dam's grandsire; he also had the gift of trotting in 2.20.

Corbeau, St. Lawrence, Gray Eagle, Canada Chief, Whirlwind, Snow Storm, and Coeur de Leon were all French trotting or pacing stallions, and all crossed the border to the United States for stock purposes; but we do not claim as much for the French Canadian horse as a fast trotter as we do in the way of being a most useful animal to all classes of men having use for horses adapted to all purposes for which horses are wanted. Their sound body, wind, and limb is a constitutional inheritance that is propagated from generation to generation, thus giving them advantage for hard service over other breeds of less constitutional vigor.

Their feet and legs are almost exceptionally good, and they are usually free from all kinds of disease to which horseflesh is heir. They are short-coupled from the knees and hocks down, which gives great purchase power. Their strong, muscular thighs and forearms complete the limbs and make them strong enough to support the body under heavy loads, over hills and through dales, without tiring out or breaking down.

In horse-dealing, years ago, I have handled these animals by the carload with usually satisfactory results to myself and to my customers; but now I expect it would be as difficult to purchase a carload of French Canadian horses in Canada as it would be to procure a like number of Morgans in Vermont or New Hampshire, as the breeders of these horses have, perhaps



JUSTIN MORGAN.

Founder of the Morgan breed of American Horses and one of the most remarkable horses ever bred in America; foaled 1793; died 1821.

unwisely, crossed and re-crossed with other breeds or families until but few of the original types of either can be found.

They are emphatically the farmer's horse for Canada, and good specimens of this breed should weigh from 1,000 to 1,200 pounds, which is usually heavy enough for general farm work, and more economical for the farmer for all purposes, especially taking into account the cost of keep, than are the heavy draft horses of from 1,400 to 1,800 pounds.

CHAPTER VI.

THE MORGAN HORSE.

The Morgans an American breed — Beauty and power of endurance — Justin Morgan the founder — Pedigree of Justin Morgan — Description of Justin Morgan — Sherman Morgan and his pedigree — Black Hawk, pedigree and history — Ethan Allen, pedigree and history — Daniel Lambert.

THIS is strictly an American breed of horses and a New England production, the distinguishing characteristics of which are neatness and compactness of form, hardiness of constitution, soundness of wind and limb, strong digestive organs, enabling them to live on little food, the best of feet and limbs, good action, and a high degree of intelligence and spirit.

For beauty of form and power of endurance, added to gentleness and graceful activity, probably no breed of horses in the world surpasses the Morgans. They are unsually kind and show a surprising degree of intelligence; they are strong, compact, and sure footed. As roadsters and stage horses and for the general purpose horse, they have never been excelled by any other breed or class of American horses.

We have from reliable authority the history of a Morgan horse — of the old family of New England Morgans — that was frequently driven from Brattleboro, Vt., to Hartford, Conn., 80 miles, over very hilly roads, in a day, attached to a chaise containing two adults, and that he continued to do this service handsomely after he was twenty-four years old.

The founder of this breed was Justin Morgan, foaled in 1793 at Springfield, Mass. Of the origin and breeding of this horse — the founder of a mighty race — there was for many years much doubt; but as time and perseverance of investiga-

tion has unraveled the snarl, we are now, and have been for many years, ready to accept the following as his breeding:

His sire, without doubt, was a bay horse called True Briton or Beautiful Bay—he was known by both names—a son of Imported Traveler, his dam a chestnut mare sired by Ranger of Pomfret, Conn., an imported Arabian horse from Morocco, who was afterwards taken to Virginia and his name changed to Linsley's Arabian. (See Linsley's Arabian, in Arabian Horses, Chapter II.)

His grand dam was a close, compact, medium-sized, light bay mare of the Wild Air breed; a very smooth, handsome traveler. Her sire was Diamond, who was by Wild Air or Church horse, by imported Wild Air, imported by DeLaney of Long Island and afterwards taken back to England.

The third dam of Justin Morgan was a Dutch mare brought to this country (either she or her dam), by Dutch emigrant settlers of the Mohawk valley.

Of Imported Traveler, the grandsire of Justin Morgan, the Stud Book says: "This horse was second to no other of the early importations," etc. His pedigree traces in a direct and unbroken line to the White Turk and Laton's Barb mare.

Wild Air, the g. g. g. sire of Justin Morgan, the Stud Book tells us also traces in an unbroken line to the White Turk and Laton Barb mare, and was so well thought of in England that he was purchased in America and re-shipped to England.

Thus we find that history proves this most wonderful horse, Justin Morgan, that some called a scrub and some a Canadian, to be a very high-bred animal; he was, without doubt, sired by a high-bred horse and out of a well-bred dam. Indeed, he was no come-by-chance horse.

As to his true breeding, probably no horse of note that ever lived had as many different versions as to pedigree, or found more people (forty of fifty years after his death), willing to file affidavits as to his breeding; but, strange to say, no two of them were alike, so far as I can learn.

According to Lindsey in his work "The Morgan Horse,"

some filed their affidavits swearing that he was a French Canadian, while others were ready and did swear to many other versions of his pedigree. This investigation, in which I have been engaged for many years, gives me the above, I *think* correct, conclusions.

As to his individual appearance, as described by Lindsey:

"He was about fourteen hands high and weighed about 950 pounds; color, a dark bay with black points; he had no white hairs on him. His head was good; not extremely small but lean and bony; the face straight, the forehead broad, ears small, very fine and set rather wide apart, eyes medium size, very dark and prominent with a spirited but pleasant expression, and showed no white around the edge of the lid. His nostrils were very large, the muzzle small and the lips close and firm. His back was very short, the shoulder blades and hip bones being very long and oblique and the loin exceedingly broad and muscular. His body was rather long, round, deep, close, ribbed up; chest deep and wide with the breast bone projecting a good deal in front.

"His legs were short, close jointed, thin but very wide and flat, hard and free from meat with muscles that were remarkably large for a horse of his size, and this superabundance of muscle exhibited itself at every step. His coat was short, very bright and glossy. He had a little long hair about the fetlocks on the back side of the legs, the rest of limbs being entirely free from it."

His feet were rather small but well shaped, tough as iron; and he was, in fact, in every respect perfectly sound and free from all blemishes to the day of his death, which was caused by an accident when twenty-nine years old.

He was a very fast walker; in trotting his step was short and nervous, displaying considerable knee action. He was sure footed and his bold, fearless style of movement, and vigorous, untiring action, have, perhaps, never been surpassed in any horse.

He was a natural parade horse, and was perfectly kind and

pleasant in all harness, and one of the best saddle horses of his day. He could out-draw any horse of his own weight, and at short distances was a fast runner.

I have been explicit in my description of this horse, both in appearance and disposition, as he was the most remarkble animal, perhaps, in the entire history of American horses, and the founder of a race inheriting his characteristics to a remarkable degree.

Perhaps no horse in America, living or dead, ever stamped upon his descendants even to the eighth and ninth generations, his own striking, valuable characteristics, equal to him; and now after a lapse of upwards of seventy years after his death, we find some of his descendants possessed of his prevailing characteristics enough to convince the horse connoisseurs that they are indeed Morgans.

Justin Morgan died in the winter of 1821, the property of Levi Bean, near Chelsea Village, Vt., aged twenty-nine years. It was supposed that a kick received from another horse, and want of proper care, hastened his death, perhaps by several years, as he was as sound as a colt up to the time of the accident causing the same.

As to the color, weight, and height of the Morgans as a family, from their foundation as such, the bays, chestnuts, browns, and blacks predominate, with an occasional gray. The bays, as a rule, have black points with but little, if any, white. The chestnuts are mostly dark chestnuts — not sorrels — many having the tail and mane of a lighter hue than the body, and some have a white stripe in the face, with an occasional white foot or two.

A particular shade of brown seems peculiar to this breed, hence the name "Morgan brown." As to the weight of the old New England stock of Morgans, we find it to range from about 875 pounds up to 1,000 pounds; but when of the larger weight we usually find the outcross on a larger type of mares. As to height, from thirteen and one-half to fifteen hands will about cover the whole ground.

I frequently meet, here in the West, old farmers who say: "Yes, I have seen the Morgan horse at such a place, at such a time, and he was a large horse, some sixteen hands, and would weigh, I should say, 1,400 pounds; possibly more, maybe 1,600 pounds." Now it is very evident that such men have confounded the name of Morgan with that of Norman, and that explains the whole thing; but it would require much argument and some practical proof to disabuse their minds, so long made up.

The most noted son of Justin Morgan was Sherman Morgan, sired by the old horse when he was fifteen years old, and was foaled in 1809. He was bred by James Sherman of Lyndon, Vt. His dam, a chestnut mare — a pacer — belonged to that once popular breed, the Narragansett Pacer. (See Narragansett Pacer, Chapter IV.)

She was bred by Caleb Allen of North Kingston, R. I.; was used in Providence, R. I., for several years by John Brown as a saddle mare, and was taken to Vermont expressly to be bred to Justin Morgan — James Sherman being, formerly, a Rhode Island man.

Sherman Morgan was a dark chestnut in color, with two white hind feet and ankles, and a white stripe in the face, taking his color from his dam, while in other respects he was the counterpart of his sire. In height he was thirteen and three-quarters hands; in weight, 975 pounds.

This was a most remarkable horse for durability, for, perhaps, no stock horse ever worked so hard as he did (unless it may have been his sire).

Linsley said: "Most of the year he was kept constantly at work on the farm, much of which he helped to clear up; and in the winter worked steadily in a team consisting of this stallion and his half brother, by Justin Morgan. This team, running from Lyndon, Vt., to Portland, Me., became famous at every inn from Lyndon to Portland, and, after a time, no teamster dared match his team — however heavy — against it,

either in pulling or for speed, and at a dead pull at a log he never in his day found a match."

Continuing, the same historian says: "Sherman was a hard master, and it is said used his team very roughly at times, and always worked this horse very hard from four years old until he was ten, when he sold him to Stephen C. Gibbs of Littleton, N. H." But the Vermonters, after having seen his stock developed, could not afford to let New Hampshire retain him, and he was brought back to Vermont; and when the New Hampshire people saw his stock somewhat developed, they outbid the Vermonters and got him back there again, and in 1831 he made the season in Charlestown, Mass., and was, perhaps, the most popular stallion in New England, if not the United States, of that time.

He finally died in Lancaster, N. H., in 1855, at the age of twenty-six and one-half years, as sound as he was on the day he was foaled, and the cause of his death is to this day unknown, as he was left at ten o'clock in the morning, apparently perfectly well, and at one o'clock in the afternoon was found dead.

The most noted son of Sherman Morgan was Black Hawk, later known as Hill's Vermont Black Hawk, and recorded in the "Trotting Register" Black Hawk (5). This horse was sired by Sherman Morgan when he was twenty-four years old, and was foaled the property of Wingate Trombley of Durham (now Greenland), N. H., in 1833.

His dam was a half thoroughbred — perhaps more — black mare from New Brunswick, and not a Narragansett Pacer as erroneously claimed by Wallace. He, evidently, got the dam of this horse mixed up with the dam of his sire.

This Vermont Black Hawk was the founder of the Black Hawk branch of the Morgan family. He was said to be the handsomest horse of his day, and the most stylish carriage horse. Black Hawk was a coal black in color, about fifteen hands high, and weighed 950 to 1,000 pounds. He was used as a gentleman's roadster and family carriage horse until eleven

years of age, before being used as a stock horse; after which he earned for his owner, David Hill, of Bridgeport, Vt., the sum of $34,000, commencing at $10 per mare and ending at $100, cash before service. He was a great sire and his colts were much sought after and sold for high prices, and now, forty years after his death, it is not considered a detriment to our best bred trotters to have their pedigrees trace to him.

Black Hawk was very handsome, stylish, and fast. In color, the descendants of this horse were usually black, bay, or chestnut. His stock was generally larger than himself, being mostly from larger mares. This horse also died, at the age of twenty-one years, as sound as a "Spanish Mill dollar."

In handling colts from many different sires I have ever found his among the very best for general use. The most noted of all the sons and daughters of Black Hawk was Ethan Allen, sired when he was fifteen years old.

Ethan Allen was one of the most noted horses in America or the world in his day. In color he was a bright bay with black legs, mane, and tail, had three white feet, a star, and a white snip. He was bred by J. W. Holcomb of Ticonderoga, N. Y., and foaled in 1849. His dam was a medium-sized gray mare, sired by a Morgan horse called Robbin. When at maturity Ethan Allen was fifteen hands high, and weighed 900 pounds. He was the fastest trotting stallion living in his day, a very reliable trotter, and the greatest campaigner of his time, and undoubtedly the greatest campaigning stallion of the world to date.

He had an excellent temper and gait for either the road or track, and was a natural trotter from his colthood. His training commenced at an early age, appearing in public on the turf every year from two to twenty years of age. He was a perfect-gaited horse, never needing any of the artificial appliances so much in vogue at the present time. He was beautiful to look upon, and came as near perfection as the American trotter as any horse that ever lived.

Ethan Allen was the sire of many good and fast horses, but

his crowning effort in the stud was the producing of that most noted of all Morgans — as the sire of speed — Daniel Lambert, who was foaled in 1868, bred by W. C. Clark of Ticonderoga, N. Y., and was one of the most beautiful all-around horses that ever lived. In trotting action he was simply perfect, and in his prime was called the most beautiful horse in America.

In color he was a beautiful shade of chestnut, with one white hind foot and a star, with mane and tail of a lighter color — flaxen — of extraordinary fineness and beauty. He had very fine limbs, neck, and head. He sired many fine speed-producing stallions, among which are Motion, Ben Franklin, Abraham, Aristos, and others of note.

DANIEL LAMBERT 102, SIRE OF

Comee,	2.19¼	Motion,	2.29
Lambert B.,	2.21¼	Pauline Lambert,	2.29
Ella Doe,	2.23½	Clara Morris,	2.29¼
Jim,	2.23½	Green Mab,	2.29¼
Nancy,	2.23½	Flora Huff,	2.29¼
Wild Lily,	2.24	Annie Lou,	2.30
George R.,	2.24	Joe S.,	2.30
Lady Foxie,	2.24¼	May Morning,	2.30
Jimmy Stewart,	2.24¼	and dams of	
John Hall,	2.24¼	Pamlico,	2.10½
George A.,	2.24½	Altar,	2.16¼
Jubilee Lambert,	2.25	Dandy Jim,	2.16½
Dickard,	2.25¼	Ruth Wilkes,	2.17½
Maggie Lambert,	2 25¼	Minerva,	2.18
Dan Miller,	2.25½	Overholt,	2.19
Nonesuch,	2 25½	Virginius,	2.19¼
Blanchard,	2.25½	Wyandot,	2.19½
Billy D.,	2.26	Gilmore,	2.21¼
Addison Lambert,	2.27	Sea King,	2.21¼
Annie Page,	2.27¼	Silver Lace,	2.21½
Ben Lambert,	2.27	Rose Filkins,	2.22
Baby Lambert,	2.27¼	Miss Foxie,	2.22¼
Aristos,	2.27¾	Revenue,	2.22¼
Annie Laurie,	2.27¾	Exarch,	2.23¼
Boston,	2.27¾	Madge Wilkes,	2.23½
Col. Moulton,	2.28½	Charles Reade,	2.24¼
Cobden,	2.28¾	Lotta,	2.24½
M. Y. D. Colt,	2.28¾	Claudius,	2.25
Ben Franklin,	2.29	Sister Barefoot,	2.25

Katie M., ... 2.25½
Massasoit, ... 2 25¾
Callisto, ... 2.26
Baron Browne, 3, . . 2.26¼
Howell, 3, ... 2.26¼
Emma B., ... 2.26¼
Haldane, ... 2.26½
California Lambert, . . 2.27
Anna Knowlton, . . 2.27¼
Duane, ... 2.27½
Crete, ... 2.27¾
Duellon, ... 2 28
Red Lambert, . . . 2.28½
Jingles, ... 2.28¾
Capt. Bowman, . . . 2.28¾
Juno Wilkes, 3, . . . 2.29
Malachi, ... 2.29
Busby, ... 2.29¼
Golden, ... 2.29¼
Olivia, ... 2.29¼
Mambrino Lambert, . . 2.29½
Early Bloom, . . . 2.29¾
Five Points, . . . 2.29¾
Foxwood, ... 2.30
Nyanza, 2, ... 2.30
Prima Donna, p., . . 2.09¼
Nightingale, p., . . . 2.13½
Louie M., p , . . . 2.19½
Snowbird, p., . . . 2.22

PRODUCING SONS OF DANIEL LAMBERT.

Air Line.
Sired dam of
Robert M. Taylor, . . 2.23½
Abraham, 353.
Frank, ... 2.19½
Bessie H., . . . 2.25¾
Kitty Cook, . . . 2.26
Jeannie, ... 2.27¼
Belle Shackett, . . 2.27½
Alice, ... 2 28
Belle of Albany, . . 2.29¼
Brightwood, p., . . 2.19¼
and dams of
Ketch, ... 2.18¾
Hustler, ... 2.29½
Addison Lambert, 743.
Susie, ... 2.26
Shadow, ... 2.29¼
Aristos, 771.
H. B. Winship, . . 2.20¼
Warren, ... 2.20¾
R. D. F., ... 2.21¼
Gillig, ... 2.23½
Aristotle, ... 2.23¾
Col. Kip, ... 2.24¼
Carlotta, ... 2 26
Levi Aristos, . . . 2.26½
Jno. I., ... 2.26½
Aristomont, . . . 2 27¾
Clegg Wright, . . 2.29
Essex, ... 2 29
Tamerlane, 3, . . . 2.29
Frank Dana, . . . 2.29¾
Lexington Chief (p. 2.20¼), 2.30
G. H. K., p , . . . 2.24½
and dams of
Rustic, ... 2 27
Toney, ... 2.27
Arnutta, ... 2.27¼
Maid of the Wilderness, . 2.27½
Arpansa, ... 2.30
Allmyown, p , . . . 2.24¼
Sons have sired
ARISTOS, JR., 2848.
Treadaway, . . . 2 24½
Don Aristos, . . 2.29¾
Lady Vivian, p., . . 2 17¼
GILLIG, 14258.
Rupert Gillig, . . 2 21¾
Sue Gillig, 3, . . 2.25¼
C. W. MITCHELL, 2120.
Maggie Mitchell, . . 2.21¼
Jno. Mitchell, . . 2.26¼
Billy Mitchell, . . 2.28¾
and dam of
Rapid Transit, . . 2.29¼
H. B. WINSHIP, 3874.
Lady Winship, . . 2.23½
and dams of
Leicester, . . . 2 17¼

Sprague Winship, . 2.29¼
SHERMAN ARISTOS.
Maid of the Wilderness, 2.26¼
Aurora, 1884.
Constance, . . . 2.21¼
Maud, ... 2.27
Daniel Lambert, . . 2.28
Bay Lambert, 11839.
Miss Fanny Jackson, . 2 30
and dams of
Jacksonian, . . . 2.28½
Bessie, ... 2.29¾
Bay Star, 11267.
Amy Lee, . . . 2.14
Roxy Lee, . . . 2 26¾
St. Lambert, . . . 2.29¼
Ben Franklin, 753.
Dynamite, . . . 2.20¾
Hulda B., . . . 2.21¾
May Be, ... 2.24
Orwell, ... 2 24
Althea, ... 2 24½
Rare Ben, . . . 2.26
Peerless Ben, . . . 2.26¼
Nimbus, ... 2.26¼
Katisha, ... 2 26¾
California Lambert, . 2.27
Frank H., . . . 2 27½
Dennis H., . . . 2.28
Belle Franklin, . . 2.28¼
George C., . . . 2.28¼
Cambridge Girl, . . 2.28½
Belle Girl, . . . 2.28¾
Charley Ray, . . . 2.29
Little Witch, . . . 2.29
R. W. S., . . . 2.29¼
Surprise Franklin, . . 2.29½
Bessie, ... 2.29¾
Cassie B., . . . 2.29¾
Helene, ... 2 29¾
McMyatt, . . . 2.30
N. O. D., . . . 2 30
Buck Franklyn, p., 2, . 2 17¾
Henry C., p., . . . 2.24
and dam of
Cap. Thorne, p., 3, . . 2.18½

Sons have sired
CALIFORNIA LAMBERT, 10936.
Aaron S., 2, . . . 2.29
Maj. Lambert, p , 3 (r), 2.19¼
GLEN ALLEN.
B. F. Solon, . . . 2.24¼
RARE BEN.
Rare John, . . . 2.29¼
Charlie Wicker, 3844.
Myrtle S., . . . 2.26
Josie D., ... 2.30
Champlain, 1041.
Chamois, p., . . . 2.16¼
Happy Girl, p., . . 2.23¾
Cobden, 1048.
Helen M., . . . 2.27
Cobden, Jr., p., . . 2 15
Cobdela, p., . . . 2.21¾
Dick Preble.
Lady M., ... 2.24
Escort, 4497.
Hermie, p., . . . 2.24½
Firefly, 8953.
Delmonte, . . . 2.21¼
Col. Harry Lambert.
Ethel Lambert, . . 2.29¾
Harrester.
J. Y. G., ... 2.25
Island Chief, 3899.
Phil. Dwyer, . . . 2.29¼
Jack Lambert, 6190.
Miss Cawley, . . . 2.23½
Jesse Lambert.
Flora O., ... 2.25
Jim Lambert.
Eunice, ... 2.26½
John Lambert, 1809.
Goldfinder, . . . 2.23¼
Jubilee Lambert, 518.
Jubilee Lambert, Jr., . 2.27½
Jubilee De Jarnette, . 2.29¼
Lambert Chief, 3432.
Minnie Moulton, . . 2.27¼
Fanny B., . . . 2.29½

Lambertus, 2263.

Sylvester K.,	2.20¼
Sir Thomas,	2.26¼

Motion, 1544.

Whist,	2.18¾
Daisy Lambert,	2.23¼
Hattie L.,	2.25½
Crome,	2.26

Mountain Boy, 4250.

Daisy C.,	2 22¼
McIntosh,	2.27½
Bessie Braddock,	2.30

Premier.

Blondin,	2.28¾

Royal Lambert, 7012.

Golden,	2.29¼

Star Ethan, 18727.

Little Dan,	2.19¼
Pearl,	2.25½
Swanton Boy,	2.27¼
Split Ears,	2.29½
U. Tell,	2.29¾
Allan,	2.30
Ben H.,	2.30
and dam of	
Bessie W.,	2.28

Thought, 16830.

Archie B.,	2.18½
Mac,	2.20½

SIRES WHOSE DAMS ARE BY DANIEL LAMBERT.

ALTAR, 2648.

Grover C.,	2.30

ARISTOS, JR.

Treadway,	2.24½
Don Aristos,	2.29¾
Lady Vivian, p.,	2.17¼

REVENUE, 1976.

Rena Rolfe,	2.18¾
Mendicant,	2.28¼
Reve So,	2.28¼
Renown,	2.29½

CALIFORNIA LAMBERT, 10936.

Aaron S.,	2.29
Maj. Lambert, p. (r),	2.19¼

FOXWOOD, 3406.

Fox Hunter,	2.30

HALDANE, 4548.

Hustler,	2.20½
Howell, 3,	2.26¼
Halo,	2.27

PAMLICO, 7156.

Little Tobe, 3.	2.29¼

PERFORMERS WHOSE SECOND DAMS ARE BY DANIEL LAMBERT.

Butterfly,	2.19¾
Pure Wilkes,	2.19¾
Bessie Wilkeswood,	2.20
Eagle Bird,	2.21
Banquet,	2.24
Nimbus,	2.26¼
Castalia,	2.29¼
Capt. Thorne, p.,	2.19½

OTHER DESCENDANTS.

Monbars, 3,	2.11¾
Galileo Rex,	2.12¾
Purity Wilkes,	2.15¾
Leicester,	2.17¼
Alamito,	2.19
Prue,	2.21½
Robert M. Taylor,	2.23½
American Jay,	2.24¾
Knoxie Walker,	2.28½
Rapid Transit,	2.29¼
Sprague Winship,	2.29¼
Hustler, p.,	2.15¾
Amy L., p.,	2.21
Eagle Princess, p.,	2.21¾

RECAPITULATION.

Standard performers,	36
Sons (29) with,	101
Daughters have produced,	49
Grandsons (8) with,	13
Mares by sons have produced,	12
Sires out of daughters (7) with,	15
Daughters have produced the dams of,	8
Other descendants,	17
Total,	251

"Nothing succeeds like success," and that opportunity has very much to do with success none can deny; if Daniel Lambert had been taken to Kentucky in his prime and bred to a class of mares belonging to Kentucky alone at that time, there is no doubt that he would now, instead of being credited with thirty-eight trotters in the list, have stood much nearer the head of all trotting sires of the world.

While Daniel Lambert has wonderfully distinguished himself as a sire of trotters, he has even still greater distinction as a progenitor of handsome, stylish, spirited roadsters, with speed enough for gentlemen's road driving, and in this respect he has never been equaled.

There were scores of his sons and daughters used as roadsters, which were never trained for speed nor stepped upon a race-track, that could beat 2.30 on the road with ease, and that had beauty and style enough to win the admiration of any horseman, and that sold for very high prices.

CHAPTER VII.

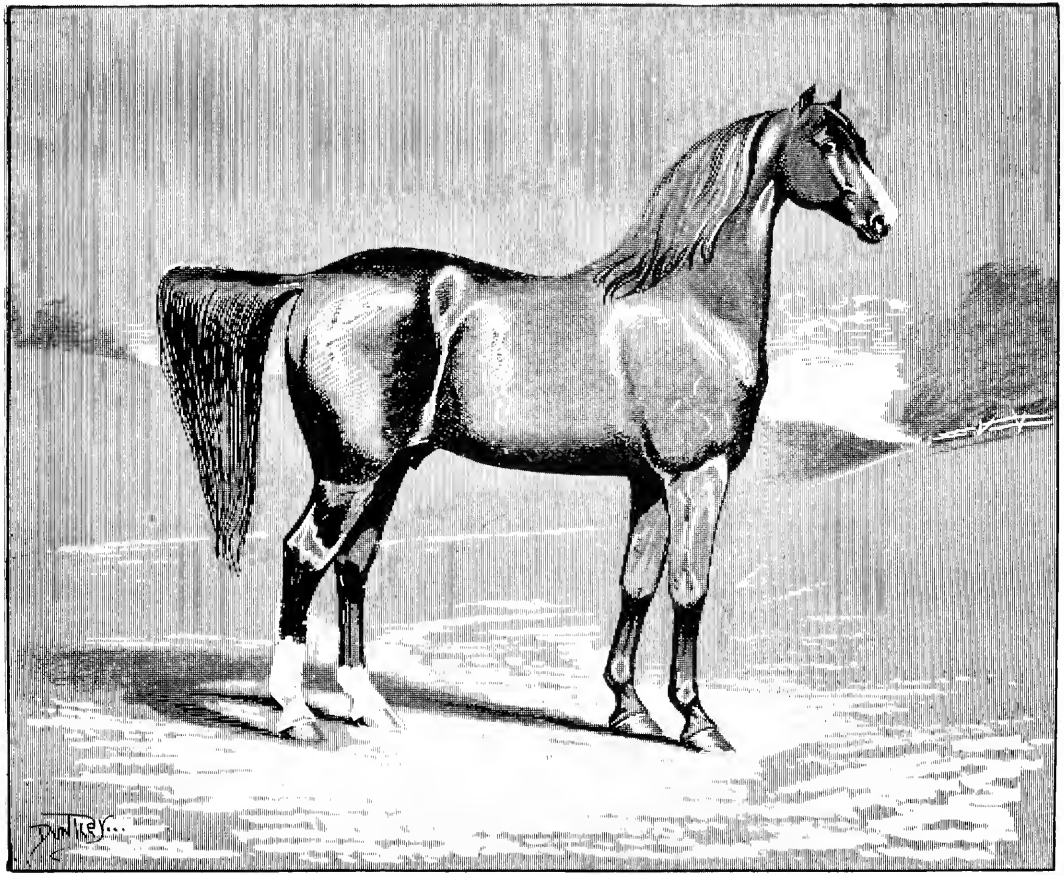
MORGAN HORSES.— *Continued.*

Woodbury Morgan — Royal Morgan — Morgan Caesar — Green Mountain Morgan — Morgans for stage purposes — Morgans for cavalry service — Adaptation to rough and hilly roads — As trotters — Ripton — Last message of Ethan Allen.

AMONG other individual members who have contributed to establish and perpetuate this great and mighty family may be mentioned Woodbury Morgan, foaled in 1816, the property of Lyman Wright of Tunbridge, Vt. He was a dark, rich chestnut, with one white hind foot and a stripe in his face. He was fourteen and three-quarters hands high and weighed 990 pounds. He was a very handsome, bold, and stylish horse, with great resolution and nervous temperament. He was a good driver and appeared well in harness, but showed to the best advantage under the saddle and was the best parade horse of his day. He was sired by Justin Morgan, dam untraced. He finally died in Alabama in 1838 from exposure in a long and stormy sea voyage, at twelve and one-half years old, perfectly sound.

Mr. Lindsley, in "Morgan Horses," says:

"Royal Morgan was foaled in 1821, the property of Mr. Aldrich of St. Johnsbury, Vt., sired by Sherman; dam known as the Aldrich mare, and sired by Justin Morgan. She was a dark bay of remarkably compact form, with great powers of endurance, having produced and nursed a colt when twenty-nine years old. Royal Morgan was thirteen and three-quarters hands high and weighed 975 pounds; color, dark bay with full black points and a small star in forehead. This horse was taken to Maine and had much to do with establishing the noted roadsters and gentlemen's driving horses of that State,



SHERMAN MORGAN.
The most noted son of Justin Morgan, and sire of Vermont Black Hawk.

and was brought back again to Vermont and was owned by a Mr. Crane, and by some known to this day as the Crane horse. Mr. Crane became so much attached to this horse that a short time previous to his death he directed that a likeness of the horse should be carved on his tombstone, which, I believe, has been done. When I last heard of this horse he was thirty-five years old and as sound and limber as a colt."

From the same source of information I gather the following:

"Morgan Caesar was foaled in 1828, the property of H. Smith of Hartland, Vt.; sired by Woodbury, dam by Quicksilver. He was fifteen hands high and weighed 1,100 pounds, was a fast driver — could go a mile in those times in three minutes, and was driven twelve miles with two men in a sleigh in forty-four minutes.

"This horse stood several seasons in the State of Maine, and was really the founder of that family, or class, of roadsters for which Maine has become quite famous. But the Vermonters were too shrewd to allow him to always remain in the Old Pine Tree State and got him back again to that of the Green Mountains, where he died in 1848, aged twenty years, and he also died sound in limb. His stock was among the best-selling stock in Vermont, and geldings of his get brought from $300 to $500 each."

Again: "Green Mountain Morgan — Hale's, — was foaled in 1834; sire, Gifford Morgan; g. s. Woodbury; g. g. s. Justin Morgan and dam sired by Woodbury, a dark bay mare of beauty and action.

"Green Mountain was fourteen and one-half hands high and weighed 1,100 pounds; color, a deep bay. He was a great show horse; was taken West in 1853 and exhibited at several fairs and took first premium at State fairs at Kentucky, Ohio, and Michigan. In 1854 he received first premium at the Vermont State Fair. He was a horse of great muscular development and remarkably nervous and spirited action.

"A boldness in his style, a fire in his eye, and an unceasing

play to every muscle, once seen by any person having a taste for a fine horse could never be forgotten. In boldness and gracefulness of style he was considered incomparable in his day, and when he appeared on the show-grounds at Louisville, Ky., at the State Fair in 1853, he met with a cordial welcome and was greeted on entering the exhibition ring with such eagerness and applause that told full plainly that his form and style of action were new to the Kentuckians, and was, nevertheless, appreciated by the thousands of strangers before whom he was moving.

"It may be proper to state here that this horse was taken from Vermont to Dayton, Ohio, in a box car, without any stop for rest. The fair being over he went directly to Detroit, arriving there after the commencement of their fair. From Detroit he went directly to Louisville, where he arrived late at night previous to the last day of their fair. When brought into the ring of stallions the next morning, the blue ribbon—the highest prize—had just been tied on a beautiful dapple gray of the Gray Eagle stock, but when Green Mountain, then nineteen years old, pranced by the grand stand, the multitude immediately shouted, 'Take it off! Take it off.' It was, accordingly, transferred to Green Mountain."

As before stated, the Morgans are a general purpose breed. This is most emphatically true. In New England we find them doing the work on the farms, doing livery business, used as family horses, and they are much sought after as roadsters and gentlemen's drivers. Before the advent of railroads, when traveling was all done by horse power, we find some of the best and most durable horse teams in the land composed of these same little Morgans.

Mr. Lindsley says: "For stage purposes their equal for hilly countries has never been found. As a case in point I will state an old-time incident, occurring some fifty years since. A party of gentlemen made a trip to the White Mountains. After having made the customary examinations they arrived late one night at the Franconia 'Notch House.' Here they

learned that a stage would leave for St. Johnsbury the next morning on its last trip for the season, it being then late in the month of September. This being the route our party preferred taking they engaged passage at once. Consequently the next morning, six good-sized individuals, besides the driver, with about an ordinary horse-load of baggage were stowed away in the rugged looking stage-wagon to which was attached a pair of medium-sized horses, as follows: The near one, a gelding of a dark chestnut color, about fourteen and one-half hands high, very closely and compactly built, with a clean, small head and exceedingly small ears set wide apart and very lively and active. The other was a gray mare somewhat heavier and considerably taller. She had a fine, long hip, well-shaped shoulders, and was, on the whole, a very fine animal.

"The party all objected to starting out with so small a team which they deemed quite unable for such a load to be drawn over such a mountainous and hilly road; but as remonstrances prevailed nothing the passengers fell to discussing the chances of getting on with their infant team, as they facetiously called it, and, from this, to discussing the relative merits of their two nags.

"One of the party whose fancy had been taken by the brilliant but pleasant eye that stood out large and free, the ever restless ears, and the strong, muscular loins and quarters of the chestnut, proposed to back the horse, much to the amusement of most of the party.

"When, at length, the driver gathered up the ribbons and gave the word, the mare dashed ahead as if determined to drag the driver off the seat. The horse struck a short, nervous trot, without fretting, and kept steady at it. The mare took the whole thing for the first half mile almost entirely by the bit, and the travelers had a hearty laugh at the judgment of my Rhode Island friend who had 'backed' the chestnut horse.

"A half hour passed and with it a good five miles of the road; by this time 'bets were not so freely offered on the mare;' she had commenced to slacken her pace, perspired freely,

moved unsteadily, with an occasional toss of the head that plainly told that she was beginning to lose her interest in the trip.

"As to the horse, not a muscle moved save those of the ears. Thus they kept on for fourteen miles, which was the end of the first stage; the mare much fatigued with panting and exhaustion. Here they were to have a fresh team, but owing to a horse being very lame from a recent severe sprain, the driver changed but one and drove the chestnut gelding through to St. Johnsbury, some fourteen miles further. This seemed to the party rather hard, but the horse did not seem to mind it in the least, and up the long hill leading into St. Johnsbury he pressed on at the same short, nervous trot which he had maintained all the way. On leaving the stage at St. Johnsbury, the party took a good look at the little horse that had achieved such a wonderful task, and were told by an old horseman that knew, that the little chestnut was a son of old Sherman Morgan, that he was eighteen years old, and that he had been running constantly on a stage team for eleven years."

Endurance is pre-eminently the heirloom of the Morgan family.

As regards the adaptability of Morgans as stage horses, Mr. Lindsley says: "I will here give the statement of an old 'stager' by the name of Milo June, who, by the way, was considered one of the best judges of his day. When asked to give his views respecting Morgans as stagers, he said: 'I have spent the greater portion of my life in staging, formerly in Vermont, now in Missouri. I take pleasure in bearing testimony to the decided superiority of the Morgan horses for coach service over any others that I have ever used. I have bought many horses in Ohio, Indiana, Illinois, Kentucky, and Missouri, and although an occasional good roadster may be found, they are not common. Many of the horses of these States have fine forms and good carriage, yet lack the high, free spirit, unflinching courage, and iron constitutions the Vermont Morgans so generally possess.

"'Very many of the Western horses are too large. Large horses may be the best for draft, but I have always found horses of medium size, ranging, say, from 1,000 to 1,050 pounds, the most serviceable and enduring by far when used before a coach.'"

D. C. Lindsley, Esq., the author of "Morgan Horses," also says that Mr. O. Walker, one of the most successful stage owners of our country in his time, and who was well known both in the East and the West (and the great fortune which he secured by his own exertions sufficiently attests his practical wisdom and sound judgment), in a letter dated Chicago, April 21, 1856, says:

"Being a Vermonter, I have known Morgan horses as long as I have known any. I have resided in Chicago the last seventeen years, during which time I have been largely engaged in the business of staging, which business affords constant employment for about 1,500 horses, and have thus had opportunities for observing and attesting the capacity and endurance of horses. I have no hesitation in saying I consider the Morgan horse far superior to any other breed or blood I have ever known for the road or farm; in fact, I would prefer them over all others for any kind of service on the American continent. They are invariably good feeders and easily kept, and will not only perform and do more service in a year, but will give more years of service than any other breed of horses I have ever known.

"Of the horses hitherto raised in the Western States, and particularly west of the Lakes (although much improved within a few years, and many fine horses may now be found among them), it is undeniably true that a Morgan horse from New England will outlast two horses raised in the West.

"It is also true that but few Morgan horses have as yet been brought from New England, west of the Lakes, and generally true that their services are very much sought by intelligent breeders throughout the country. Any number of inferior horses may be found in the West which are claimed to be of

Morgan blood. This attempt to palm off counterfeits is the highest evidence of the value of the genuine blood.

"The ready and general objection in the West with those who are not familiar with the Morgans, is want of size, forgetting that their size should be judged by their weight and not by the length of their legs, and that the same bodies upon long legs would look much larger."

During the War of the Rebellion in the United States, there was a great demand for medium-sized horses for the cavalry service, and not only the States, but Canada as well, was drained of this class, especially geldings, to supply the demand.

Of all the mounted troops passing under the review at Washington of the late lamented Gen. Grant — a great lover of fine horses — none were so pleasing to his practiced eye as the Vermont Cavalry whose mount consisted principally of Morgans.

The Morgan producing States, *viz.*, Vermont and New Hampshire, were during this war so completely drained of their stock that in order to supply their customers, who by this time had become quite numerous, they — some of them — bought up light horses from the West and from Maine and Canada and after acclimating them among the mountains, were ready to sell to inexperienced buyers as Morgans.

I don't accuse the breeders or farmers of practicing this fraud, but charge it to the dealers and jockeys. There have been so many horses, first and last, sold for Morgans, that were but little, if any, akin to them, and that were so lacking in the general requisites of the true Morgan, that many have been sadly disappointed as to the expectations they had formed of their ability to perform all that was claimed for them.

A well-bred horse of the old stock of New England Morgans has never yet, to my knowledge, deceived the purchaser, but of course they should not be held responsible for the class of horses sold for New England Morgans, whose veins contain, perhaps, not one drop of the blood of old Justin Morgan. This style of horse-jockey dicker has done more injury to the Mor-

gan family of horses than any and all things else that has been done to their detriment.

The Morgans seem especially adapted to the rough and hilly country roads of New England from the fact that they are sure-footed; they are almost iron hoofed; they are able to descend the steepest hills on a round trot, and their adaptability to ascend or climb those same hills, even with a load, would put to shame many much larger horses.

As to the success of the Morgans in the trotting circuit we find by the records that no less than 100 Morgan stallions have sired trotters with well-earned records of 2.30 or less, and that such Morgan trotters number more than 200.

Of the nine stallions of all the trotting stallions in the world up to 1887, who had sired individual trotters whose winnings on the trotting turf had amounted to $10,000 and upwards, we find that three out of the nine were Morgans, *viz.*, Black Hawk, Ethan Allen, and Daniel Lambert — father, son, and grandson.

The Morgans were among the earlier trotters of the United States and figured on the trotting turf long before it had any such race-tracks as we now find all through our land. (The race tracks of those days were usually half-mile tracks and at the present day would be considered but mere apologies for the development of speed.) And long before America's best hickory wood and the best manufactured steel had done so much towards producing light and suitable vehicles such as we now have, saying nothing about the bike which has — it is claimed — reduced the records from the best and lightest high-wheel sulky, very materially.

Among the recorded trotting performances in races of from forty to sixty years ago, may be found the following:

RIPTON, the fastest trotting son of Sherman Morgan, made his debut on the trotting tracks of New York and Philadelphia in 1835. He successfully competed with the best trotters of his day and scored a record of 2.38 (one mile in harness) and 5.15 — two miles in harness. (See Ripton in "*Old Time Trotters*," *Chap. XXII.*)

About 52 years ago Black Hawk won a race by trotting five miles in fifteen minutes, and in 1843 he won a race of two miles with ease in 5.43 and single mile heats in about 2.40.

"In 1853, his daughter, Black Hawk Maid, won a race of two mile heats in 5.23, in 1861 his son, Lancet, made a record of 2.27½. Lady Sutton, by Morgan Eagle, won a mile race in 5.17. Beppo, by Gifford Morgan, won a race in 2.31½, and Pizarro, by Morgan Cæsar, also won a race in 2.35."

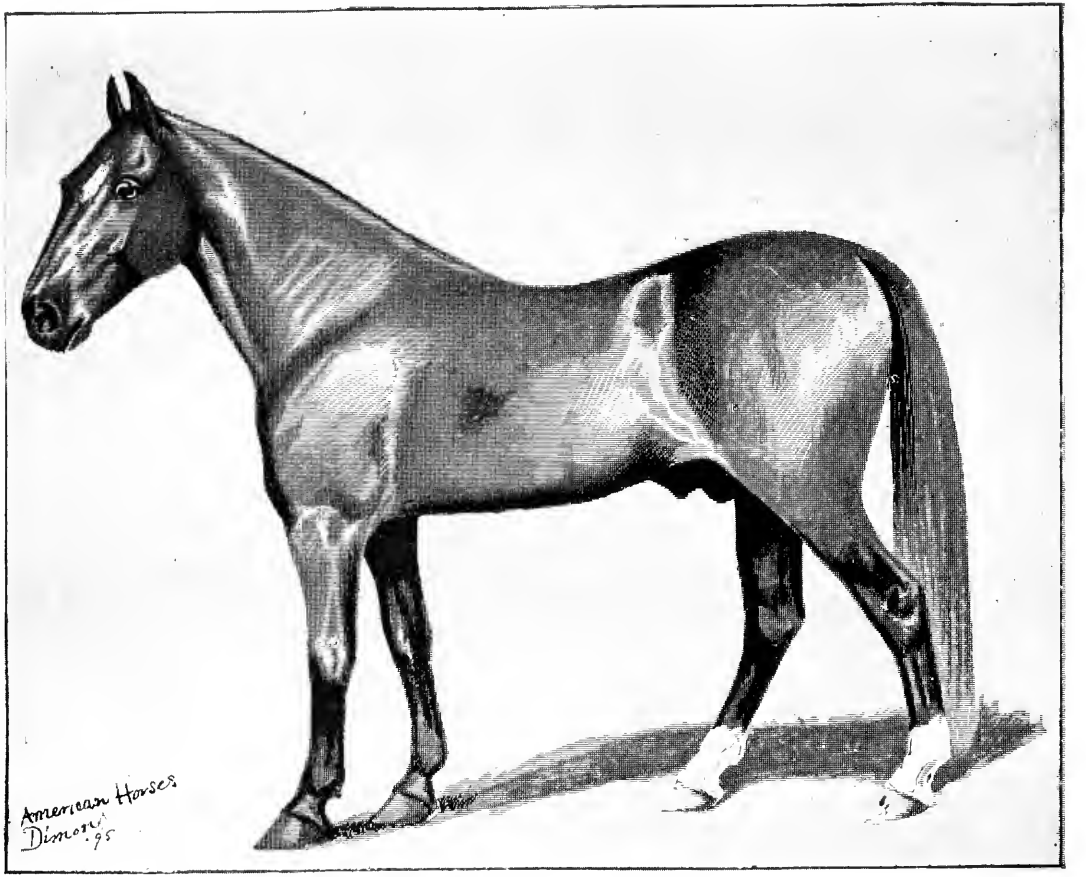
I mention these few instances of old-time fast trotting of Morgan horses, not to call the attention of my readers to their records as being fast as compared to the best records of the present day, but merely to show that the Morgans of "ye olden tyme" were possessed of some speed at the trot; and now, when we compare those records with the best of the present day, considering all the contingencies of the case, those old-time Morgan trotters, with but little development and minus track advantages and speed-producing vehicles and appliances of our time, were not so far behind the modern trotter as would seem at the first glance at the records.

The Morgans are our oldest trotting family, and if they have not produced our very fastest trotters, their produce deserves to stand at the very head of all, as good tempered, hardy, and pleasant roadsters.

Of all the Morgan horses ever bred perhaps no individual among them has attracted the attention of the American people equal to Ethan Allen eighteen years before the public as a show horse and a trotter. His great race with Dexter in 1867, June 21st, and which crowned him as King of the Morgans, is still remembered by many.

This horse was finally purchased by the Messrs. Sprague and Aikers for stock purposes, and died on their Kansas stock farm in 1876, aged twenty-seven years.

The following soliloquy from the "American Horse Breeder" may not be out of place here, as the



RYSDYK'S HAMBLETONIAN.

The great progenitor of American trotters and founder of the Hambletonian family, foaled 1849 died 1876; sire of 1,333 living foals.

LAST MESSAGE OF ETHAN ALLEN.

"I stand and gaze to the eastward,
O'er prairies rolling and low;
Seeking in vain for the mountains
And the friends of long ago.

And I long for the evergreen forests,
For the sound of the brooklet's rill;
And a draught of the sparkling water
From the spring at the foot of the hill.

Time is fleeting, years are passing,
Tears are dropping; I'm alone;
Quite forgotten, thinking, longing,
For my loved Green Mountain home.

When my form was lithe and youthful,
Like the Indian's supple bow;
When my flight was like the eagle's,
Or the lightning's vivid glow.

Days of triumph, days of victory,
Dexter beaten, 'spite the taunt:
'He is nothing but a Morgan
Who is fighting for Vermont.'

I can hear the joyous shouting,
I can see the flowers they bring
To deck their own, loved Ethan Allen,
Crowned that day 'The Morgan King.'

Tell me, have they quite forgotten
All the deeds that I have done?
Do they think of Ethan Allen
At the setting of the sun?"

CHAPTER VIII.

RYSDYKE'S HAMBLETONIAN.

History and pedigree — The Charles Kent mare — Imported Belfounder — Abdallah, sire of Hambletonian — Stud career — Great value of the get of Hambletonian — Hambletonian's sons of renown.

THE history of this world-renowned sire of speed and that of his ancestors is an interesting topic to all, and especially to those who are just entering the breeding ranks; but it is already so familiar to the practical breeder and to many lovers of the American trotting horse that they know it by heart.

In the summer of 1848 Mr. Joseph Seeley of Sugar Loaf, Orange County, N. Y., bred an animal known as the Charles Kent mare to Abdallah, by Mambrino, a son of Imported Messenger. The result of this service was a bay colt with two white feet and ankles and a small star, which was afterwards known as Rysdyke's Hambletonian; which, when a weanling in 1849, was sold with its dam to a Dutch farmer of the same county named William Rysdyke — the price of both being $125.

This Charles Kent mare was bred by J. S. Jackson of Oxford, N. Y., and foaled in 1834; hence was fifteen years old when she produced this noted son.

This mare was a daughter of Imported Belfounder, a beautiful and powerful although not large horse, bred in Norfolk County, England, foaled in 1816, and imported to Boston, Mass., in the ship *Rasselas*, arriving there July 11, 1822.

He was imported by James Boot, who paid £700 sterling, or about $3,500, for him in England; he was a natural trotter and fast. Extracts from his service card for 1823 read as follows:

"Belfounder was got by that well-known, fast, and high-formed trotter, Old Belfounder, out of Velocity, by Haphazard, by Sir Peter, out of Miss Hewey, by Eclipse; grand-dam was of good North Country blood, but not thoroughbred. Velocity trotted on the Norwich road in 1806 ten miles in one hour, and though she broke fifteen times into a gallop and as often turned around, she won the match. In 1803 she trotted twenty-eight miles in one hour and forty-seven minutes, and has also done many other great performances against time.

"Belfounder, at five years old, trotted two miles in six minutes and in the following year was matched to trot nine miles in thirty minutes, which he won easily by twenty-two seconds. His owner afterwards challenged to perform with him seventeen and one half miles in one hour, but it was not accepted; he has since never been saddled nor matched.

"Old Belfounder was a true descendant from the original blood of the Fireaways, which breed of horses stand unrivaled for the saddle, either in this or any other nation."

As to the Fireaways mentioned in the above advertisement, we have an account of a great many performers of this family in England; among others of a mare called Nonpareil trotting in a vehicle called a match cart 100 miles in nine hours and fifty-seven seconds; her sire was Fireaway, owned in the county of Norfolk.

A son of this same Fireaway, called Norfolk Phenomenon, out of a Shields mare, is spoken of by the London *Sunday Times* of May, 1839, as "the fastest trotter that ever stepped. He is known to have performed two miles in five minutes and four seconds and is said to have trotted twenty-four miles in an hour."

From the above it would seem that the Fireaways were a remarkable trotting family, and from this it would seem that the trotting instincts received by Rysdyke's Hambletonian from Abdallah and Bishop's Hambletonian, through Imported Messenger, were very materially strengthened by the Belfounder cross in his dam.

Belfounder stood at Charlestown, Mass., about six years, and was then leased to parties in New York State for $500 per year. He finally died on Long Island in 1843.

His blood mixed admirably with that of Abdallah and Clay. The dam of Sayer's Harry Clay, 2.29, was by Imported Belfounder. Sayer's Harry Clay got the dams of twelve 2.30 trotters, and also the dam of the great Electioneer with 150 performers in the list with records ranging from 2.08¼ to 2.30.

The Charles Kent mare was naturally a very superior animal. When three years old she was purchased from her breeder by a Mr. Seeley for $300. He sold her for $400 to a Mr. Pray, who sold her to a New York butcher named Chivers for $500, who, in turn, sold her to a banker for $600.

While owned by the New York banker she became so lame as to be unfit for road work, and was sold to Charles Kent, who bred her to Webber's Tom Thumb, the produce being a filly which bred to Vernol's Black Hawk, son of Long Island Black Hawk, brought the noted trotting sire, Green's Bashaw, whose list of 2.30 performers outnumbers that of any other stallion tracing in the male line to the noted stallion Andrew Jackson.

One Eye, dam of the Charles Kent mare, was by Bishop's Hambletonian, out of Silver Tail by Imported Messenger. Bishop's Hambletonian was by Imported Messenger, out of Pheasant by Shark; he by Marske, sire of the great English race horse "English Eclipse."

Abdallah, the sire of Hambletonian, was a bay horse, fifteen and three-quarters hands high, bred on Long Island, N. Y., got by Mambrino and foaled in 1823, hence was twenty-six years of age when Hambletonian was foaled.

Abdallah was a coarse, homely horse, and was never well patronized in the stud. J. W. Hunt of Lexington, Ky., purchased him in the fall of 1839, and rode him from New York city to Lexington, Ky., and made the season of 1840 with him at Lexington. But he failed to be appreciated by the breeders of the Blue Grass country, and his stud duties were said to be very light.

He afterwards stood in New Jersey, and in 1849 stood at the "Bull's Head" at New York with fee reduced to $15, yet still without much patronage.

His coarse, ungainly looks, together with his rather unpleasant disposition, which, it is said, he transmitted, was greatly against him. In appearance, Old Abdallah, as he was called, was a brown bay, standing fifteen hands three inches, with a coarse, bony head, a gamey, resolute eye with considerable white around the edge of the lid (such as is often seen on piebald horses), prominent ears, short neck, high, sharp withers, being higher forward than behind, strong but rather narrow loin, straight croup, tail light and set very high, being on a line with the backbone and having but little hair on it — being what is called a rat-tail.

He was an all around homely horse, but with a good set of legs and feet. He was never broken to the harness, but under the saddle could show about a three-minute clip, and had a clean, open gait, and good knee action, and his get were mostly all trotters.

He was finally given to a farmer, who sold him to a Long Island fisherman for $35, who, thinking he might utilize him in delivering the products of the ocean to his customers, hitched him to his cart. Abdallah, still having notions of his own, considered the cart of more account for kindling wood, and consequently kicked it into numerous fine pieces; after which the disgusted fisherman turned the horse loose upon the sands, where he finally died of starvation, in November, 1854, at the age of thirty-one years, as sound as a colt.

Rysdyke's Hambletonian stands to-day at the very head of all horses ever foaled in America, or the world, as the great progenitor of trotters. He was very successful in the stud, and sired 1,333 living foals. He made his owner, the late William Rysdyke, both rich and famous, and after his death, in March, 1876, strangers contributed to build him a lasting granite monument to perpetuate his memory.

Hambletonian's Stud Career.

When Hambletonian was two years old he served four mares and three foals resulted therefrom, Alexander's Abdallah being one of them. When he was three years old he served seventeen mares, getting thirteen foals — Lady Woodhull, the dam of Hambletonian (1221) which horse made a record of 2.26¼ in 1885, being one of them.

The same year Hambletonian was shown at the New York State Fair, and defeated Roe's Abdallah Chief in two heats, time 3.03 and 2.48. Some ignore this performance entirely, but that something did give Hambletonian a boom the year afterwards cannot be denied, for 101 mares were served by him, which was something unheard-of for a four-year-old colt.

That year he sired seventy-eight living foals, and among them Volunteer and Logan. In 1854, when but five years old, his fee was raised from $25 to $35, and that year he sired the famous George Wilkes, Edward Everett, and Billy Denton. In 1855 he sired Sackett's Hambletonian. In 1856 he sired Lady Augusta, 2.30¼, and Belle Brandon, dam of Amy, 2.20¼, and Gov. Sprague, 2.20½. The next year, when eight years old, he sired Dexter, 2.17¼, and so on to the end.

To show his recognized merit at that time, in 1863 his service fee was raised from $35 to $75, at which he received 150 mares, and that year he sired Jay Gould, 2.20½, Harold, Peacemaker, Regulus, Hotspur, Lysander, Macedonian, Idol, and Belle, the dam of Elmer, 2.22¼. In 1864, when fifteen years old, his patronage was 217 mares, from which came 148 foals, a feat never performed by any other noted horse, excepting, perhaps, Blue Bull.

From this season's service came Hamperion, 2.19½, Gazelle, 2.21, Effie Deans, 2.25½, Messenger Durock, Walkill Chief, Knickerbocker, Rysdyke, Milwaukee, Chosroes, Jack Shepherd, Virgo-Hambletonian, Reporter, Mape's Horse, Buckingham, Bay Billy, Sampson, Ouida, dam of Trinket, 2.14, Miss Brunette, dam of Black Prince, 2.25½, etc.

So rapidly grew his reputation that in 1864 his fee was put to $100; in 1865, to $300, and the next year at $500, and continued at that.

The blood of Seeley's American Star mingled kindly with that of Hambletonian; the union gave us great performances on the track, such as Dexter, 2.17¼, Nettie, 2.18, and Orange Girl, 2.20.

Prominent among the Hambletonian-Star family stallions are Dictator, sire of Jay Eye See, 2.10¼, Phallas, 2.15½, and Director, 2.17; Aberdeen, sire of Hattie Woodward, 2.15½, and Modoc, 2.19½; Jay Gould, sire of Adele Gould, 2.19; Startle, sire of Majolica, 2.17; Walkill Chief, sire of Great Eastern, 2.18, and Dick Swiveller, 2.18.

Robert McGregor, 2.17½, is by a grandson of Hambletonian out of Nancy Whitman by Seeley's American Star; and Driver, 2.19½, is by Volunteer, out of Silver Tail by Seeley's American Star.

Hambletonian was the sire of thirty-seven in the 2.30 list, which thirty-seven animals (it is said) either sold for, or in their palmy days would have sold for the magnificent sum of $339,000, and has been figured out as follows:

Administrator,	2.29½	$5,000	Jay Gould,	2.21½	$30,000
Alma,	2.28¾	2,500	Jerome,	2.27	3,000
Astoria,	2.29½	2,500	Kisber,	2.27¾	7,000
Belle,	2.22	15,000	Lydia Augusta,	2.30	2,500
Breeze,	2.24	6,000	Lady Banker,	2.23	8,000
Bruno,	2.29½	15,000	Lottery,	2.27	4,000
Chester,	2.27	3,500	Lottie,	2.28	4,000
Deucalion,	2.22	10,000	Madeline,	2.23¼	6,000
Dexter,	2.17¼	35,000	Margarite,	2.29	2,500
Drift,	2.29¾	5,000	Mattie,	2.22½	15,000
Effie Deems,	2.25½	4,000	Maud,	2.29¾	3,000
Ella Madden,	2.25¾	4,000	Nettie,	2.18	25,000
Enfield,	2.29	10,000	Nutwood (to wagon),	2.23	4,000
Factory Girl,	2.29¾	3,000	Orange Girl,	2.20	10,000
Gazelle,	2.21	20,000	Scotland Maid,	2.28½	4,000
George Wilkes,	2.22	25,000	Sentinel,	2.29¾	10,000
Hamperion,	2.29½	3,500	Small Hopes,	2.26½	8,000
Harvest Queen,	2.29½	8,000	Young Bruno,	2.23¾	8,000
James, Jr.,	2.24	8,000			

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

The average price of the thirty-seven 2.30 performers being a fraction over $9,162. Dictator was sold for $25,000 when twenty years old.

The stallions in this list which have won renown in the stud are Administrator, George Wilkes, Jay Gould, and Sentinel. Their united progeny would have sold for a fabulous amount of money.

The fastest of the get of the above performing sires are as follows: Administrator, Catchfly, 2.18¼; George Wilkes, Wilson, 2.16¼; Jay Gould, Pixley, 2.16; and Sentinel, Von Arnim, 2.19½.

Of the trotting stallions of the world having a total of fifty or more in the list, arranged according to their respective standing as measured by the total number of standard performers, are Electioneer, with 150; Nutwood, with 106; Red Wilkes, with 102; Happy Medium, with 88; George Wilkes, with 78; Onward, with 77; Blue Bull, with 60; Egbert, with 60; and Alcantara, with 51.

Of these nine greatest sires in the world, four are the sons of Hambletonian, three are his grandsons, and one is his great-grandson.

As to the source from which Hambletonian derived his marvelous speed-producing qualities with the power to perpetuate the same to his descendants, I claim, and always have claimed, that there should be as much credit given his dam as to his sire, and that this great Norfolk born-trotter, Imported Belfounder, a direct descendant of the great Fireaway family of England, should receive as much credit as Imported Messenger.

I know that Wallace laid great stress on the fact that Hambletonian was "inbred to Messenger"; yes, he was, but all the Messenger strains in Hambletonian combined made him but one-fourth Messenger. He was also one-fourth Belfounder; just as much Belfounder as Messenger.

We find the potency of the Belfounder blood in the Clay family, as more trotters trace to Sayer's Harry Clay than all

other Clays put together (excepting, of course, his ancestors), and his dam was by Imported Belfounder.

Then there is in Hambletonian's greatest son, Electioneer, with 155 sons and daughters in the list, an additional strain of Belfounder blood through his dam, whose sire was Sayer's Harry Clay.

Then the greatest sire of all the Bashaw family was Green's Bashaw, whose grand-dam was the Charles Kent mare, dam of Hambletonian, by Imported Belfounder.

CHAPTER IX.

ALEXANDER'S ABDALLAH.

Pedigree and early history — His speed potency — Sprague's Hambletonian one of his best ones — Sprague's Hambletonian sire of Governor Sprague — Abdallah in motion.

IT has for years been a disputed question among horsemen as to which of the sons of Rsydyke's Hambletonian was the most potent factor and deserving of the most credit in establishing the American trotter. Of course if we go by the records, Electioneer leads all others; but if we go by age and opportunity, giving him full credit, I am disposed to favor Abdallah (15) foaled in 1852, got by Hambletonian (10) — at the age of two years — bred by L. J. Sutton of Warwick, N. Y., and sold to Major Edsall, a hotel-keeper of Goshen, Orange County, N. Y., and by him sold to Messrs. Love and Miller of Cynthiana, Ky., in February, 1859, for $2,500. He was taken to Kentucky and his name changed from Edsall's Hambletonian to Love's Abdallah.

When the war came on, Mr. Love was afraid of losing his horse and proposed selling him to Lord Robert A. Alexander, proprietor of Woodburn Farm, believing him safe in the hands of a British subject. Mr. Alexander at first declined to purchase, but finally made Love an offer for him provided he could be made to trot in 2.35 with a month's handling — 2.42 being his record. James Monroe, who was then working for Mr. Alexander, took the horse and in two weeks' handling he trotted a full mile in 2.30¼, and the deal was completed, Mr. Alexander paying $2,500 in cash and another good horse. His name was then changed to Alexander's Abdallah. The history of his being stolen by the guerrillas, re-captured by Union troops, and ridden to death at the age of thirteen years is familiar to all.

The blood of Alexander's Abdallah is potent and speed giving generation after generation. Had he the opportunities of George Wilkes, Electioneer, and many others of the sons of Hambletonian, I have no hesitancy in going on record as saying he was one of the very best of all the great sons of that great progenitor of trotting speed. As it is, if we give him credit for *all* that justly belongs to him, and thus placing him as the grand-sire of Gov. Sprague, who was undoubtedly sired by Sprague's Hambletonian, who, in turn, was unquestionably one of Alexander's Abdallah's best sons; then, and not till then, can we count on his true merits as one of our greatest progenitors of trotting speed.

Sprague's Hambletonian was kept for stock purposes only one season and not advertised at that, but was used as a road-horse both in New York and Rhode Island, and with his mate, Belle Brandon, was considered at one time the best road team in New York city. He was then known by the name of New York. He, with his mate, Belle Brandon, was purchased by Col. Amasa Sprague of Rhode Island, and his name changed to Sprague's Hambletonian. Col. Sprague used them as a road team, and a good team it was—I remember them well—and in 1870 they were mated together, the result of which union was a black colt afterwards known as Governor Sprague, but recorded as the son of a horse called Rhode Island.

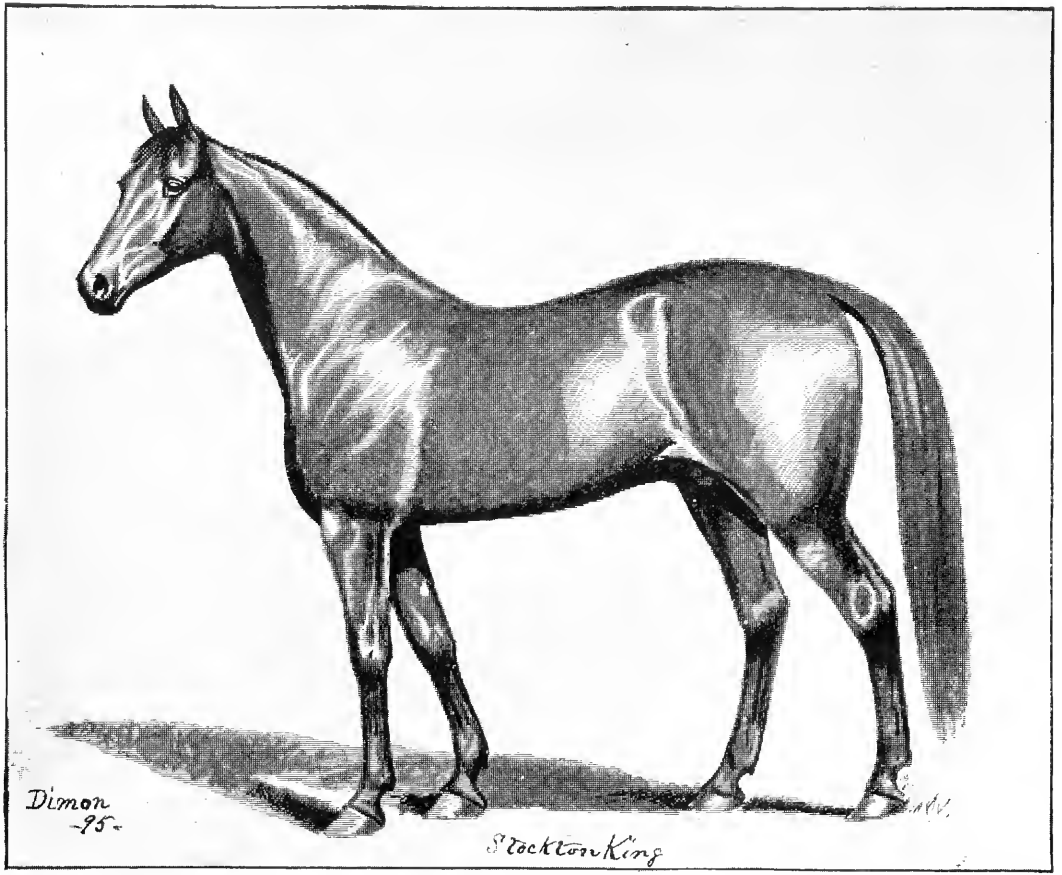
He also sired Boston-Boy-Hambletonian, 2.25, Gov. Dimon, Col. Sprague, Lady Sprague, and a few other good ones in Connecticut and Rhode Island. The three last-named foals of Sprague's Hambletonian were all bred by myself in 1875—foaled in 1876—and could all trot; the two former were great roadsters and very fast although never trained for speed.

Sprague's Hambletonian died in Pomfret, Conn., in the fall of 1876 of epizootic and the want of proper care. He was a great horse, and I claim that with equal opportunities, the peer of any of the sons of Abdallah.

Abdallah died at thirteen years of age, just as he was beginning and had an opportunity to make for himself a noted

name at the head of the Woodburn trotting stud. He sired that greatest campaigner of her time, Goldsmith Maid, 2.14, Rosalind, 2.21¾, Thorndale, 2.21¼, Major Edsall, 2.29, and St. Elmo, 2.30. He also sired thirteen sons, who, altogether, sired twenty-four trotters and four pacers better than 2.30. He also sired nineteen mares who have produced twenty trotters and two pacers better than 2.30, besides being the legitimate grandsire of Gov. Sprague, the founder of the Sprague family.

Alexander's Abdallah in motion was one of the grandest horses ever seen. His dam, Katy Darling, like the dams of most great horses, was much more than an ordinary mare. She was a noted road mare of her day and was undoubtedly well-bred, although, unfortunately for the breeding student, her breeding cannot be satisfactorily traced.



STOCKTON KING.

A typical Electioneer Stallion; one of the best trotting bred grandsons of the great Electioneer, with 155 trotters in the list; bred in California, owned by John Dimon, Hartford, Conn.

CHAPTER X.

THE ELECTIONEERS.

Electioneer the greatest trotting sire of the world — Superior to his sire — A natural trotter — Marvin's description of him — Ability to get early and extreme speed — List of performers and dams of performers.

ELECTIONEER, the greatest trotting sire of the world, was foaled in 1868. He was bred by Charles Backman of Stony-Ford Stock Farm in Orange County, N. Y., at which place his dam now lies under a monument raised to the memory of this great mother of trotters, and not very far from where the monument marking the resting place of his honored sire, the Hero of Chester, points its finger of memory upwards and onward, and where horsemen, in years to come, traveling in that region, will remember the great hero of trotting speed, now lying under the "live oaks" at Palo Alto, Cal.

Electioneer, before going to California in 1876, at the age of eight years, had no opportunity in the stud, so his achievements and those of his family really date from 1878. And in estimating his rank as a sire this fact should be considered, and the records may be searched in vain to find another family line that in the short space of twelve years (as he died in 1890) rose to such an enviable position.

In color and general conformation Electioneer resembles his sire, Hambletonian; and being out of the greatest mare ever embraced by Hambletonian, he may safely be called his best-bred son; and his breeding was backed up by extraordinary good individuality.

He was, however, in many respects superior to his sire in beauty of form and style of movement. He was good and stout at all points, denoting marvelous strength and symmetry of structure, and he was a useful, common-sense appearing horse from his brainy head to the very tip of his tail.

In height he measured fifteen and one-half hands at the withers and an inch higher behind, giving what I call the Hambletonian pitch, a singular order of conformation which is noticeable in a pronounced degree in many of his get, and notably so in Campaign and Sunol.

His broad forehead and general expression of intelligence furnish the explanation of his power to control the mental organizations of the thoroughbred, thereby making his crosses on the thoroughbred the most successful and the most marvelous of any stallion that ever lived. Probably the most striking feature in the general make-up of Electioneer was the enormous power and strength of his quarters; in this respect the stamp of his sire was most noticeable.

Although Electioneer was never trained for a record or ever in a race, he was a fully developed and natural trotter, and in his exercise on the Palo Alto track he could carry the speedy Occident 2.16½, right up to his speed; and there is no question in the minds of those who knew him best that in his prime he could easily have beaten 2.20 if required.

Electioneer goes on record as the sire of more 2.30 trotters, more 2.20 trotters, and more young record breakers, than any other horse in the world.

The late Gov. Stanford often expressed the belief that Electioneer never sired a colt but that with proper training was capable of trotting in 2.30 or less, and a common expression with him was: "The Electioneers all trot."

It is claimed that much of Electioneer's blood was frittered away in experimental courses, and his power was used to demonstrate to the world that strictly thoroughbred mares may be able to produce fast trotters. While he did demonstrate beyond a doubt and to the most skeptical his ability to do this, there can be no doubt that he would to-day have had many more performers to his credit had his harem consisted of selected trotting mares exclusively.

It is claimed that the ability to get fast trotters out of thoroughbred mares is the severest test to which a stallion can

be subjected in the transmittance of his blood lines; and the simple fact that the dead Electioneer was so successful on this class of mares, alone should stamp him as a horse of marvelous prepotency.

Green Mountain Maid, the dam of Electioneer, was a most wonderful mare, and perhaps, all things considered, has proved herself to be the greatest trotting brood mare ever on earth.

She was sired by Harry Clay, 2.29, the great brood mare sire, who sired in addition to Green Mountain Maid, the dams of St. Julian, 2.11¼; Bodine, 2.19¼; Elaine, 2.20, and sixteen others in the trotting list.

The dam of this most wonderful mare was Shanghai Mary, a great natural trotter and a stayer.

Among Green Mountain Maid's famous children, besides the great Electioneer, are Prospero, 2.20; Elaine, 2.20; Dame Trot, 2.22; Elista, 2.22¾; Mansfield, 2.26; Storm, 2.26¾; Antonio, 2.28¾; and Marinda, 2.31.

Green Mountain Maid stands out in bold relief at the very head of all brood mares of the world as being the dam of more fast trotters than any mare that ever lived, — aside from being the dam of Electioneer.

In 1881 Senator Leland Stanford offered Mr. Backman $10,000 for the celebrated equine matron, then in her twentieth year, and when Mr. Backman had already realized $46,330 from the sale of her foals and had seven of her sons and daughters left. The memory of this great mare will be kept green for generations yet to come through the turf performances of her progeny.

In most cases the get of Electioneer inherited his conformation, and in most cases measured rather higher behind than at the withers. The brainy head of Electioneer accounts for the heads and brains of his offspring; "Beautiful in shape and level in balance."

Marvin, in describing Electioneer, says: "He has a good shoulder, splendid barrel, faultless back, and simply the best quarters that I ever saw on a stallion."

As a three-year-old he was broken to harness and driven some in a wagon. In this way of going Mr. Charles Backman timed him quarters in 38 seconds, with but little work.

Charles Marvin, in his excellent book, "Training the Trotting Horse," says: "Electioneer is the most natural trotter I have ever seen. He has free, abundant action; it is a perfect willing action both in front and behind, and he has not the usual fault of the Hambletonians of going too wide behind."

He further says: "I have driven Electioneer a quarter better than 35 seconds and although this may not be fast enough to suit the critics of Electioneer, I call any horse that can speed faster than a 2.20 gait a trotter."

Continuing, Marvin says: "He did this, too, hitched to a 125-pound wagon with a 220-pound man — and not a professional, either — in the seat. Without preparation you could take out Electioneer in stud condition any day and drive him an eighth of a mile at a 2.20 gait.

"He always had his speed with him, and this is a characteristic of his sons, and, to my mind, one of great importance to breeders. That Electioneer could have beaten 2.20 if given a regular preparation is, with me, a conviction about which no doubt exists."

His roll of honor consists of the following records as gathered from the trotting statistics; and this not only fully demonstrates his ability to get extreme early speed, but the ability of his get to train on:

Yearlings.

Hinda Rose, dam by The Moor,	2.36½

Two-Year Olds.

Sunol, dam by General Benton,	2.18
Wild Flower, dam by The Moor,	2.21
Bonita, dam by St. Clair,	2.24½
Fred Crocker, dam by St. Clair,	2.25½
Bell Boy, dam by The Moor,	2.26
Carrie C., dam by Henry Clay,	2.27¼
Pedlar, dam by Mohawk Chief,	2.27¾
Palo Alto Belle, dam by The Moor,	2.28½
Sphinx, dam by Belmont,	2.29½
Del Mar, dam by Toronto Sontag,	2.30

Three-Year Olds.

Sunol, dam by General Benton,	2.10½
Bell Boy, dam by The Moor,	2.19¼
Hinda Rose, dam by The Moor,	2.19½
Palo Alto Belle, dam by The Moor,	2.22½
Campbell's Electioneer, dam by Clark Chief,	2 22½
Maiden, dam by Alexander's Norman,	2.23
Manzanita, dam by St. Clair,	2.23¼
Rexford, dam by General Benton,	2.24
Sphinx, dam by Belmont,	2.24¼
Hattie D., dam by Nutwood,	2.26¾
Grace Lee, dam by Culver's Black Hawk,	2.29¼

Four-Year Olds.

Manzanita, dam by St. Clair,	2.16
Benita, dam by St. Clair,	2.18¾
Antevola, dam by A. W. Richmond,	2.19½
Palo Alto, dam by Planet (thoroughbred),	2.20¼
Albert W., dam by Son of Imported Trustee (thoroughbred),	2.22¼
Sphinx, dam by Belmont,	2.23
Albert W. (two miles),	4.51
Lot Slocum, dam by Mohawk Chief,	2 23½
Gov. Standford, dam by Hambletonian,	2.23¼
Carrie C., dam by Henry Clay,	2.24
Clifton Bell, dam by Abdallah Star,	2.24½
St. Bel, dam by The Moor,	2.24½
Mortimer, dam by Hambletonian,	2.27
Egotist, dam by Belmont,	2.29
Ella, dam by Mambrino,	2 29
Azmoor, dam by Imported Hercules,	2.30

Five-Year Olds.

Lot Slocum, dam by Mohawk Chief,	2 17
Gertrude Russell, dam by Planet,	2.23½
Clay, dam by Henry Clay,	2.25
Emeline, dam by Woodburn,	2.27½
Cubic, dam by Imported Australian,	2.28½

Six-Year Olds.

Anteo, dam by A. W. Richmond,	2.16¼
Lot Slocum, dam by Mohawk Chief,	2.17¼
Adair, dam by Culver's Black Hawk,	2.17½
Old Nick, dam by Chieftain,	2.23
Carrie C., dam by Henry Clay,	2.24½
Azmoor, dam by Imported Hercules,	2.24¾
Morca, dam by Mambrino Pilot,	2.25
Express, dam by Express,	2.29½
Arbutus, dam by Messenger Duroc,	2.30

In the preceding table of early records of the sons and daughters of the great Electioneer, especially when we take into consideration the breeding of their dams, may be found an object lesson worthy of study by the coming breeder of the American Trotter, as in it we find the unmistakable ability of this great sire to transmit his speed quality to his sons and daughters through mares of different breeding and of different breeds, and thoroughbreds as well as trotters and pacers.

As to the trotting action of the Electioneers, Charles Marvin says: "They are mostly prompt, round-gaited horses, and straight-lined trotters. They do not have to square away or strike a position to get up speed.

"As a rule they are close gaited. The majority of them do not throw the hind foot outside of the fore foot in trotting, but go under the line trotting principle. They do not have to go a mile or so to get untangled; they trot low, have no waste action, and gather speed quickly and smoothly."

Electioneer sired the following list of performers, and sires and dams of performers, as per the latest official reports:

ELECTIONEER, 125, SIRE OF

Arion, 4,	2.07¾	Mont Rose, 3,	2.18
Sunol,	2.08¼	Ah There,	2.18¼
Palo Alto,	2.08¾	Electric Coin,	2.18¼
Truman, 4,	2.12	Conductor,	2.18¼
Expressive, 3,	2.12½	Altivo, 4,	2.18½
Belleflower, 4,	2.12¾	Bonita,	2.18½
Norval,	2.14¾	Coral,	2.18½
Advertiser,	2.15¼	Suisun,	2.18½
Expedition,	2.15¾	Rustique,	2.18½
Starlight,	2.15¾	Regina,	2.18½
Manzanita, 4,	2.16	Bell Boy, 3,	2.19¼
Anteeo,	2.16½	Bow Bells,	2.19¼
Ladywell,	2.16½	Antevolo,	2.19½
Amigo,	2.16¾	Hinda Rose, 3,	2.19½
Del Mar,	2.16¾	Monaco,	2.19½
Bernal,	2.17	Albert W.,	2.20
Adair,	2.17¼	Ansel,	2.20
Lot Slocum,	2.17¼	May King,	2.20
Electioneer (Campbell's),	2.17¾	Azmoor,	2.20¼
Electricity,	2.17¾	Sphinx,	2.20½

Utility,	2 20¾	Monterey,	2.25½
Express,	2.21	Paola,	2.25½
Gov. Stanford,	2.21	Quality,	2.25½
Helena, 3,	2.21	Sweet Rose, 1,	2.25¾
Wildflower, 2,	2.21	Fowler Boy,	2.26
Elector,	2.21¼	Ivo,	2.26
Laura R.,	2.21¼	Dan,	2.26¼
Ellencer,	2.21½	Veda,	2.26¼
Bell Bird, 2,	2.22	Arbutus,	2.26½
Cecilian, 2,	2.22	Candidate,	2.26½
Junio,	2 22	Lent,	2.26½
Belle Monte,	2.22¼	Loraneer, 3,	2.26½
Egotist,	2.22½	Hattie D.,	2.26¾
Palo Alto Belle, 3,	2.22½	Electant,	2.27
Advance, 3,	2.22½	Electuary,	2.27
Brilliant,	2.23	Lucyneer, 3,	2.27
Fallis,	2.23	Mortimer,	2.27
Maiden, 3,	2.23	Don Felix,	2.27¼
Old Nick,	2.23	Elwina, 2,	2.27¼
Grover Clay,	2.23¼	Jim,	2.27¼
Susette,	2.23½	Re-Election,	2.27¼
Gertrude Russell,	2.23½	Emaline,	2.27½
Addie Lee, 2d,	2.23¾	Hugo,	2.27½
Kerneer,	2.23¾	Idle May,	2.27½
Marvin,	2.23¾	Minet,	2.27½
Pedlar,	2.23¾	Whips,	2.27½
Arol,	2.24	Election,	2.28
Carrie C.,	2.24	Outcross,	2.28
Electric King,	2.24	Sonoma,	2.28
Rexford, 3,	2.24	Liska, 3,	2.28¼
Peko, 3,	2.24	Pomona,	2.28¼
Electrician,	2.24¼	Tiny, 2,	2.28¼
Morea,	2.24¼	Alma,	2.28½
Clifton Bell,	2.24½	Antinous,	2.28½
St. Bel,	2.24½	Cubic,	2.28½
Electro Benton, 3,	2.24½	Electrix,	2.28½
Aleck B.,	2.24¾	Slight,	2.28½
Electryon,	2.24¾	El Benton,	2.28¾
Aldeana,	2.25	Emma R.,	2.28¾
Clay,	2.25	Alaska,	2.29
Fay,	2.25	Electro,	2.29
Elector,	2.25	Ella,	2.29
Young Wildidle,	2.25	Elma Sontag, 2,	2.29
Colma,	2.25¼	Grace Lee, 3,	2.29¼
Fred Crocker, 2,	2.25¼	Herman,	2.29¼
Memento,	2.25¼	Laura C.,	2.29¼
Athena, 2,	2.25½	Belle Electric,	2.29½
Caution,	2.25½	Cara Mia,	2.29½

Coquette, ... 2.29½
Eros, ... 2.29½
Ivy E., ... 2.29½
Linnet, 3, ... 2.29½
Miss Naude, . . . 2.29½
Rockefeller, . . . 2.29½
Don Monteith, . . . 2.29¾
Legal Test, ... 2.29¾
Commotion, . . . 2.30
Electress, ... 2.30
Electwood, ... 2.30
Gen Wellington, . . 2.30
Golden Slippers, . . . 2.30
Idelia, ... 2.30
Rusenole, ... 2.30
Stella, ... 2.30
Pacifica, ... 2.30
Wild May, ... 2.30
Peruvian Bitters, p., . . 2.23½
and dams of
Daly, ... 2.15
Limonera, 3, . . . 2.15¾
The Seer, ... 2.15¾
Lee Russell, . . . 2.16¼
Robert Lee, ... 2.18½
Eskimo, ... 2.18¾
Elden, 3, ... 2.19½
Marston C., 3, . . . 2.19½
Charles Derby, . . . 2.20
Greenlander Girl, . . 2.21
Greenlander Boy, . . 2.21¾
Langton, ... 2.21¾
Navarro, ... 2.22
Wanda, ... 2 22½
Millard, ... 2.23
Noya, ... 2.24
Newflower, ... 2.24
Maralia, ... 2.24¼
Nita Pancoast, . . . 2.24¼
Del Paso, ... 2.24½
Newport, ... 2.24½
Bion, ... 2.24¾
Comrade, ... 2.24¾
Covey, ... 2.25
Greenway, ... 2.25
Miss Albert, . . . 2.25¼
Waldstein, ... 2.25¼
Daghestan, 2, . . . 2.25½
Sweetwater, 2, . . . 2.26
Election, 3, ... 2.26¼
Daylight, ... 2.26¾
Rosita, ... 2.27¼
Wildmont, ... 2 27¼
Wavelet, ... 2.28
Raola, ... 2.28¼
Bentoneer, ... 2.28½
Lord Stanley, . . . 2 28½
Wild Bee, ... 2 29
Elect Cossack, . . . 2.29¼
Esparto Rex, 3, . . . 2 29¼
Hilarita, ... 2.29¼
Steineer, ... 2.29¼
Minnie B., ... 2.29¾
King Piedmont . . . 2.30
Lady Juno, ... 2.30
Crafty, p., ... 2.13½
Alcinta, p., ... 2.16¾

PRODUCING SONS OF ELECTIONEER, 125.

Advertiser, 2 15¼.
Adbell, 1, . . . 2 23
Alaska, 14429.
Lena H., ... 2.29½
Albert W., 11333.
Little Albert, . . . 2.10
Dudley Olcott, . . 2.18¼
Albert T., . . . 2.19¼
William Albert, . . 2.20¼
Arthur Dodge, . . 2.20¾
Miss Albert, 3, . . 2.25¼
Neernut, 3, . . . 2.26¾
Pansy Blossom, 3, . . 2.28½
Flowing Tide, p., . . 2.14¾
Hightide, p., . . . 2.17½
Amelia, p., 3, . . . 2.21½
Ansel, 7093.
Answer, ... 2.14½
Nettie B., . . . 2.20½
Norris, ... 2.22¼
Marie Ansel, 2 . . 2.25
Clarion, ... 2.25¾

Ariana, ... 2.26
Antella, 2, . . . 2.26½
Anselma, ... 2.29½
and dam of
Scylax, ... 2.24¼

Anteeo, 7868.
Eoline, 3, ... 2.14¾
Abanteeo, . . . 2.17½
James Madison, . . 2.17¾
Anthelia, 4, . . . 2.18
Tietam, ... 2.19
Myrtle, 3, . . . 2.19½
Alfred G., . . . 2.19¾
Maud M., . . . 2.20½
Redwood, . . . 2.21½
Maud Fowler, . . . 2.21¾
Mountain Maid, . . 2.22¼
Rex, ... 2.22½
Anteeoyne, 3, . . . 2.23
Anteeo Richmond, . . 2.24¼
Dan Brown, . . . 2.24¾
Ethel Mac, . . . 2.25
Anteeo, Jr., . . . 2.25¼
Fanny D., . . . 2.26
Grey Belle, . . . 2.27
Reyanetta, 3, . . . 2.27
Antarees, ... 2.27½
Maudee, ... 2.28¼
Electeo, ... 2.29½
G. and M., . . . 2.29½
Sunset, ... 2.29¾
and dam of
W. Wood, p., . . . 2.07
Sons have sired
ALFRED G., 12452.
Queen Alfred, 3, . . 2.18¼
Nelly Alfred, . . 2.27½
ANTEEO, JR.
Hailstorm, 3, . . 2.30
JAMES MADISON, *17909.*
Bet Madison, 2, . . 2.30
Leila C., p., . . . 2.20½
REDWOOD, *11814.*
Red Oak, . . . 2.21
T. O. M.
Lady O., . . . 2.24

Anteros, 6020.
Maj. Ross, . . . 2.24¼
Anterose, ... 2.25
Nellie F., ... 2.25
Don Anteros, . . . 2.30
Nelly F., p., . . . 2.13¼
Dudley, p., . . . 2.14¾
Doc Christie, p., . . 2.21
Cairn, p., ... 2.23¼
and dam of
Luella Shawhan, p., 2, . 2.23

Antevolo, 7648.
Maud Merrill, . . . 2.18
Antioch, 3, . . . 2.21¼
Gray Belle, . . . 2.27
Berceto, ... 2.29
Consolation, p., . . 2.20
Leta May, p , . . . 2.23½

Antinuous, 4778.
Hillsdale, ... 2.17¾
John Bury—, . . . 2.22

Azmoor, 13467.
Rowena, 2, . . . 2.17
Bonnibel, ... 2.17¾
Azmon, ... 2.23¼
A. A. A., 3., . . . 2.27½

Bell Boy, 5350.
Bridal Bells, 3, . . 2.22½
Corner Bell, 3, . . . 2.23
Liberty Bell, 3, . . 2.24½
Princess Belle, . . . 2.24¾
Beauty Bells, . . . 2.29½
Anderson Bell, p., 3, . 2.20¼

Bernal, 13468.
Aria, 3, ... 2.16¾

Bow Bells, 2.19¼.
Boreal, 2, ... 2.17¼
Alarm Bells, 3, . . 2.29¾

Candidate, 13113.
Elfrida, 4, . . . 2.13½
Catherine, . . . 2.24

Chimes, 5348.
Fantasy, 4, . . . 2.06
Sixty Six, . . . 2.15¼
Midnight Chimes, 3, . 2.16¼
Chimes Boy, . . . 2.17¼
Charming Chimes, 3, . 2.18½
Princess Royal, 2, . . 2.20

Beautiful Chimes, . . 2.22½
Blue Bell, . . . 2.22¾
Electmont, . . . 2 22¾
Curfew, ... 2 24¼
Chimes Girl, 2, . . 2.26
Chide, 3, ... 2.26¼
Carillon, ... 2.27¼
Bessie Chimes, . . 2 27½
Chimesbrino, . . . 2 28½
Josie Chimes, . . . 2 29¼
June Bug, . . . 2.29¼
Boy Blue, . . . 2.29½
Merry Chimes, p., . . 2 08½
Ed Easton, p., 4, . . 2 09¾
Palo Alto Chimes, p , . 2.17½
Tanny Bug, p., 2, . . 2.17½
Eric Chimes, p., . . 2.19¾

Clay, 4779.
Parkside, ... 2.22¾
Nemo, ... 2 26¾
Clayone, 2, . . . 2.27¾
Hazel, ... 2 28
Lilac, 3, ... 2.29¼
Stanford, ... 2.29¼
Spinaway, 3, . . . 2.29½
Miss Clay, . . . 2.29¾
Claytina, p., . . . 2 14½
J. R., p., ... 2.20
Olgetta, p., 3, . . . 2.24¾
and dam of
Otalgic, ... 2.24½

Conductor, 12256.
Lilly Dale, . . . 2.27½

Don Felix, 2.27¼.
Nelly R., 3, . . . 2.26¾

Egotist, 5018.
The Conqueror, 4, . . 2.15½
Lovelace, 3, . . . 2.20
Betsy Britton, . . . 2.20¾
Elton, ... 2 21
Bishop Dudley, 3, . . 2.27
Stonewall, 3, . . . 2.27½
Birdie, ... 2.27¾
Zenith, 3, ... 2 28¾
Dramatist, . . . 2.29½
Genevieve, . . . 2.29¾
Mildred, ... 2.29¾
Gilford Dudley, 2, . . 2.30

Elect.
Elect Moore, . . . 2.27
Re-Elect, ... 2.28

Electioneer (Campbell's), 2.17¾.
Bowman's Electioneer, . 2.26½
Symboleer, p., 2, . . 2.11

Elector, 2170.
Flora M., ... 2.16
Lizzie F., . . . 2.16¼
Electra, ... 2.18¾
Cora S , ... 2.19¼
Electrina, . . . 2 20
J. R., ... 2.20
Acclamation, . . . 2.24¾
Morning Glory, . . 2.27
Electress, 3, . . . 2.27¼
Alley Sloper, 3, . . 2 28
Nettie C., . . . 2.28
Ella M., ... 2.28¾
Leck, ... 2.29
Desperado, . . . 2.29½
Pleasanton, . . . 2.29½
Elector, Jr., . . . 2.29¾
Eric, p., ... 2.17
L. A. Dick, p., . . 2.25
and dams of
Parthenia, 3, . . . 2 27¼
Cleopatra, . . . 2.29½

Elector, 10830.
Edwin C., p., . . . 2.15
Molly McCauley, p., . 2.16½

Electricity, 5344.
Welbeck, 3, . . . 2.24½
Fly, ... 2.29¼

Electro, 5382.
Belle Electro, 3, . . 2.30

Electrotype, 9006.
Pauline, ... 2.26
Electro Bell, . . . 2.27¾

Eugeneer.
Genevieve, 2, . . . 2.30

Eros, 5326.
Wanda, ... 2.14¾
Rinconado, . . . 2.17
Oro Fino, . . . 2.18

Mount Hood, . . . 2.22¾
My My, ... 2.25¾
Willema, 3, . . . 2.26
Heros, ... 2.26¼
Solita, ... 2 27
Daylight, ... 2.27¾
Donzella, 3, . . . 2.29¾
Electroid, . . . 2.30
Maraquita, . . . 2.30

Sons have sired

IRIS.

Visalia, 3, . . . 2.20
Cecilia, p., 2, . . 2.23½

WARD B.

Letter B., 3, . . . 2.27½

Fallis, 4781.

Fallacy, ... 2.17¾
Don Marvin, . . . 2.22½
Lustre, ... 2.23¾
Bradtmore, . . . 2 26¼
Falman, ... 2.27
Menlo Fallis, . . . 2.27¾
Fal Rose, p., . . . 2.19

and dam of

Donehka, 3, . . . 2.25

Sons have sired

DON MARVIN, 2.22½.

Don Lowell, . . . 2.14½
Boneset, 2, . . . 2.27½

Fordstan, 22129.

Melvar, ... 2.22

Gaviota, 7567.

Maud Alameda, 2, . . 2.24
Dynamite, . . . 2.29½

Gov. Stanford, 2.21.

Clito, p., ... 2.24½

Hummer, 6111.

Bouncer, 3, . . . 2.18½
Hustler, 3, . . . 2.20¾
Stately, p., 2, . . . 2.18

Junio, 14957.

Bruno, ... 2.19
Athanio, 2, . . . 2.19¾
St. Joe, ... 2.26
Gilpatrick, . . . 2.29½
Salinas Maid, . . . 2.30

Marvin, 2.23½.

Bramblette, 3, . . . 2.24½

Norval, 5335.

Lakeside Norval, . . 2.15
Norhawk, ... 2.15½
Orphina, ... 2.17¼
John G. Carlisle, . . 2.20
Norvin G., 3, . . . 2 20½
Norvardine, 3, . . . 2.25½
Interval, ... 2.26¼
Novelist, 2, . . . 2.27
Villiers, 3, . . . 2.27¾
Novalson, . . . 2.28½
Novelette, 3, . . . 2.29¼

Palo Alto, 5353.

Rio Alto, 3, . . . 2.16½
Palatine, 3, . . . 2.18
Avena, 2, ... 2.19½
Fillmore, 3, . . . 2.21¾

Parkville, 6050.

Sub Rosa, p., 3, . . 2.23¾

Re-Election, 2.27¼.

La Haute, 3, . . . 2.24½
Nelly Clark, 2, . . 2.30

Rockefeller, 6121.

Granieta, ... 2.25½
Nana, 3, ... 2.29½
Leola, ... 2.30

St. Bel, 5536.

Allibel, 3, . . . 2.49¼
Honeywood, . . . 2.19½
Silver Ore, . . . 2.19½
Beltown, ... 2.20¼
Election Bell, . . . 2.22¼
Bel Onward, 2, . . 2.23
Santa Bel, 3, . . . 2.23
Favora, ... 2.23¼
Tempter, ... 2.24¾
Free, ... 2.25
St. Felix, 3, . . . 2.25½
Amorel, ... 2.26
Katrina Bel, 2, . . 2.26¼
Miss Zura Belle, 3, . . 2.26½
St. Minx, 2, . . . 2 26½
La Bel, ... 2.27
Lynne Bel, 3, . . . 2 27¼
Comet, ... 2.28¼

First Bell, . . . 2.28¼
St. Aubin, . . . 2.28½
St. Croix, . . . 2.28½
Bellman, ... 2.28¾
Flora Bel, . . . 2.29½
Honey Dew, . . . 2.29½
La Petite Bel, 3, . . 2.29½
Bessie Bell, 2, . . . 2.29¾
Gold Point, . . . 2.29¾
Belzoni, 2, . . . 2.30
Legacy, ... 2.30
Robert Bel, 2, . . . 2.30
Baron Bel, p., . . . 2.11½
Notion, p, . . . 2.16¼
Fail Not, p., . . . 2.16½
Almabel, p., . . . 2.17½
Monabel, p., 3, . . 2.18

St. Just, 4780.

Lanier, ... 2.20
Mary, ... 2.24¼
St. Justin, . . . 2.29¾
Adjutant, . . . 2.30

Sphinx, 5343.

Uncle Tom, . . . 2.18¼
Baker, ... 2.19¼
Water Lily, . . . 2.19¾
Gift o' Neer, . . . 2.20
Borneo, ... 2.23
Cervus, 2, . . . 2.23½
Baltullo, ... 2.24½
Altoneer, 2, . . . 2.25
Islam, 3, ... 2.26
Valley Queen, 3, . . 2.28½
Gen. Sphinx, 3, . . 2.28¾
Magna Sphinx, 3, . . 2.29
Peru, 3, ... 2.29½
Sibyl, ... 2.29¾
Sylvia C., 2, . . . 2.29¾
Sphinxeta, p., 3, . . 2.14¼
Syrena, p., . . . 2.14¼
Cantab, p., . . . 2.14¾
Como, p., . . . 2.17¼

Sunolo, 9900.

Sunolto, ... 2.26¼
Baptism, ... 2.30

Whips, 13407.

Azote, ... 2.08¼
Cob Webs, . . . 2.12
Navidad, ... 2.22½
Warlock, ... 2.24
Manille, ... 2.29½

Will Crocker, 5333.

Irene Crocker, 3, . . 2.20
Little Crocker, . . 2.30
and dam of
St. Croix, 3, . . . 2.28½

Woolsey, 5337.

Nelly W., 3, . . . 2.17¼
Princess, ... 2.19¾
Wehina, ... 2.26¼
Sir Gird, 3, . . . 2.26½
Loyaleer, ... 2.30
Abeto, p., ... 2.21¾

SIRES WHOSE DAMS ARE BY ELECTIONEER.

CHARLES DERBY, 4907.

Derby Princess, 2, . . 2.25
Diablo, p., 4, . . . 2.09¼
Cibolo, p., 4, . . . 2.13¼

DALY, 5341.

Bonner N. B., . . . 2.17
Julia G., ... 2.23¼
Clatawa, ... 2.27½

PRINCEER, 9114.

Warren Guy, 2, . . 2.25
Ida A., ... 2.25
Freda C., 3, . . . 2 30

THE SEER, 5367.

Seersucker, . . . 2.30

WALDSTEIN, 12597.

Humboldt Maid, . . 2.27
Native Son, . . . 2.29½

WILD BOY, 5394.

Donchka, ... 2.25

WILDNUT, 13472.

Bedworth, 2, . . . 2.27
Ariel, ... 2.27¾
El Rami, 3, . . . 2.29

OTHER DESCENDANTS.

Sable Nut, 2,	2.22¼

RECAPITULATION.

Standard performers,	155
Sons (46) with,	281
Daughters have produced,	47
Grandsons (8) with,	12
Mares by sons have produced,	8
Sires out of daughters (7) with,	16
Other descendants,	1
Total,	520

CHAPTER XI.

THE BASHAWS AND CLAYS.

Grand Bashaw, Imported Arabian, the founder — Young Bashaw — Andrew Jackson — Green's Bashaw — The Patchens.

THE BLUE BULLS.

Wilson's Blue Bull — His great success in the stud — Great progenitor of speed — List of trotters and dams of trotters by Blue Bull.

THE progenitor of the Bashaw family was Grand Bashaw, an Arabian horse foaled in 1816 and imported from Tripoli in 1825 by Joseph C. Morgan. He stood near Philadelphia, Pa., for stock purposes for twenty years, and many of our fast trotters are descended from him.

His most distinguished son was Young Bashaw, a gray horse foaled in 1822, whose dam was Pearl by the thoroughbred horse First Consul; dam by Imported Messenger.

He was the founder of what is known as the Bashaw family of American trotters, and whose most noted son was Andrew Jackson, a black horse foaled in 1828, and whose dam was a good mare, pedigree unknown.

This Andrew Jackson was the founder of the Clay family. His most noted son was Henry Clay, foaled in 1837, and whose dam was a Canadian mare called Surry, pedigree untraced, but a good one and a fast trotter.

Henry Clay's best son, by the records, was Cassius M. Clay, foaled in 1843, and whose dam's pedigree was unknown.

Cassius M. Clay was the sire of three Cassius M. Clay, Jr.'s, with eight in the list, and George M. Patchen, the founder of the Patchen branch, with four in the 2.30 list.

The greatest sire of all the Bashaw family, by the records, was Green's Bashaw, five removes from the old imported

Arabian, and whose grand-dam was the Charles Kent mare, the dam of Rysdyk's Hambletonian and daughter of Imported Belfounder. So here we find another strong argument of the speed-transmitting power of the great Norfolk trotter, Imported Belfounder.

The Bashaw family embraces the Clays, Patchens, and Bashaws of the present day and includes many good and fast horses; also the blood of the Bashaw family is commingled, more or less, in the pedigrees of the following animals, forming the nucleus of that destined to be the greatest of all families, or breeds, of horses in the world,—the American trotter.

These animals are as follows, taken alphabetically:

American Clay, sire of twenty-four brood mares, with twenty-five trotters with records from 2.16 to 2.30, among which was Maggie Briggs, who sold for $10,000.

Andy Johnson, sire of three 2.30 trotters, two sires, and three producing dams.

Bashaw (Green's) No. 50, sire of seventeen trotters with records from 2.21¼ to 2.30; fifteen sires of thirty-four trotters and two pacers, and twenty-two dams of twenty-four trotters and two pacers.

Black Bashaw, sire of Cozette, 2.19, and John H., 2.20.

Cassius M. Clay, sire of eight producing sires with sixteen trotters in the list.

Cassius M. Clay, Jr. (Neave, 20), sire of four trotters in the list, and of the sires Clay Pilot, Harry Clay, and Wilgus Clay.

Cassius M. Clay, Jr. (Straders, 22), sire of three trotters, three sires and twenty-two dams of twenty-three trotters and one pacer.

Electioneer, the greatest son of Hambletonian, with 155 in the trotting list; through his dam, Green Mountain Maid—dam of nine in the list—by Harry Clay, whose dam was by Imported Belfounder.

George M. Patchen, sire of four trotters, twelve sires of forty-

eight trotters and one pacer, and the sire of five dams with six trotters.

George M. Patchen, Jr., sire of ten trotters, ten sires of nineteen trotters and one pacer, and eleven dams of twelve trotters and two pacers.

Godfrey's Patchen, sire of nine trotters, two sires and three producing dams.

Harry Clay (Sayer's, 45), by C. M. Clay, Jr., dam by Imported Belfounder, sire of four trotters, eight sires of nine trotters, and fifteen dams of twenty-six trotters; dams including the great brood mare of the world, Green Mountain Maid, dam of Electioneer, with 155 trotters in the list with records from 2.08¼ to 2.30.

Henry B. Patchen, sire of seven trotters, four dams of ten trotters, including the great brood mare Emeline, dam of Adele Gould, 2.19, and six others in the trotting list.

Idol, by Hambletonian (Backman's), sire of six trotters, etc.

Knickerbocker, sire of seven trotters, etc., by Hambletonian.

Louis Napoleon, sire of fourteen trotters and one pacer, seven sires with thirteen trotters and five pacers, and eight dams of nine trotters and two pacers.

St. Gothard, 2.27, by George Wilkes, sire of nine trotters and one pacer.

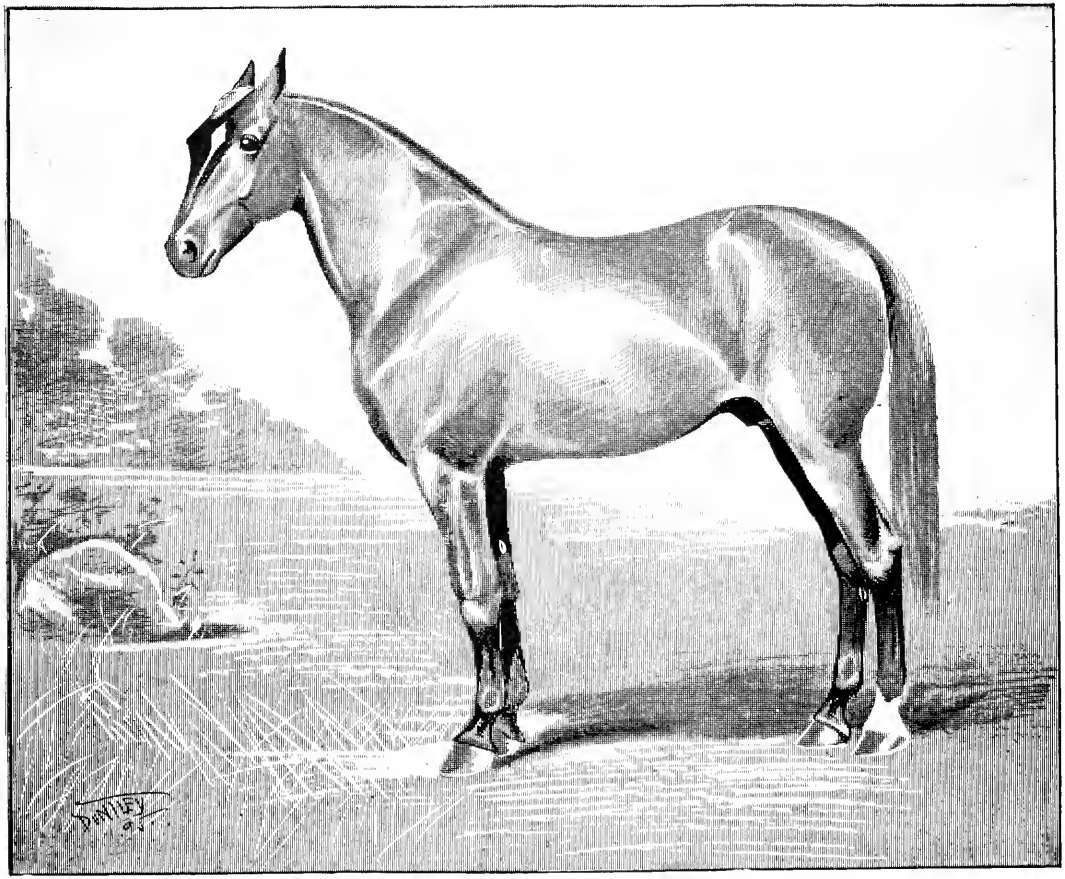
Stamboul, by Sultan, record 2.07½, sire of five trotters.

Victor Bismarck, by Hambletonian, sire of nineteen trotters and two pacers.

Waspie, sire of eight trotters, one pacer, etc.

Windsor, sire of six trotters, two pacers, etc.

Thus it will be seen that the speed-producing influence of that grand old Arabian, Grand Bashaw, who has been dead upwards of fifty years, is still felt in our land.



BLUE BULL.
Founder of the Blue Bull family.

THE BLUE BULLS.

Blue Bull, like Hambletonian, is a subject, or rather an object, that loses none of its charm by the lapse of years.

Wilson's Blue Bull, whose breeding is acknowledged by the best horsemen of the present day to be somewhat shrouded in mystery, was a horse of great individual excellence. In color he was a chestnut with an elongated star and nigh hind foot white; he stood about fifteen hands high and was of the Morgan type (see illustration); in fact, in general conformation and appearance he would pass for a Morgan the world over. As his breeding is surrounded in mystery the question naturally arises: "Was he a Morgan?"

He had a clean cut head and bright, intelligent eyes, together with the clean, cordy legs and flinty feet for which succeeding generations of Blue Bulls are noted. His appearance was that of durability, strength, and speed.

No stallion ever began life under more unfavorable circumstances and finished his career under such a brilliant crown of well-earned glory.

We will not go over the disputed ground of his pedigree, for while we do not believe in that promulgated pedigree given him by that great recorder of many false ones, we will not assault that which we cannot disprove, nor advance that which we might not be able to prove to the satisfaction of all; yet, in my own mind, and to my long-practiced eye in the comparison of families, if Wilson's Blue Bull was not a direct descendant of the Narragansett Pacer, infused with the blood of Ranger, — afterwards the Darley Arabian — the maternal founder of the Morgan, then I am mistaken.

Blue Bull's days in the stud were very nearly contemporaneous with those of Hambletonian, there being, according to accepted data, only about five years' difference in the dates of their foaling.

Hambletonian was foaled in 1849, in a community containing the very best trotting blood of that day, and from his own

good breeding became popular as a stock horse as soon as old enough for service.

Commencing at two years of age and during his twenty-two years of service in the stud, he sired more colts than any other trotting sire ever has up to date, and has, all told, forty-one trotters in the 2.30 list.

Blue Bull was foaled in 1854, in a community where trotting bred mares were unknown and with the accredited parentage that always disgraced him. His road to a decent patronage was steep, rugged, and slowly ascended; yet, with all these drawbacks he forged himself to the front, solely on his merits.

In the year that Hambletonian died, 1876, Blue Bull had seven in the 2.30 list and Hambletonian had thirty-two; but at the close of 1890 Blue Bull had fifty-five trotters and eight pacers in the 2.30 list, while Hambletonian had only forty-one trotters and no pacers. Opportunities considered, there is no room for conjecture as to which had the greatest power to produce 2.30 performers.

As before stated, the accepted pedigree of Blue Bull is not well established, and to many—a very great many—the recorded pedigree is absurd.

As for myself, I lay claim to a better knowledge of horse history than to believe for a single moment that this great horse (one of the greatest sires of speed that ever lived), descended from the plebeian ancestry accorded to him by Wallace.

Blue Bull was the first horse to sire fifty with harness records of 2.30 or better. Blue Bull was the only sire of thirteen race winners with twenty heats in 2.30 or better, at the close of 1891.

He is the only horse that ever lived that had over one hundred descendants in the first generation, who carries no blood of Hambletonian or Mambrino Chief. He has put more mares, not trotting bred, in the great brood mare list, than any horse that ever lived.

Blue Bull, by the records, is the most potent progenitor of harness speed that has ever lived. As other great sires have

depended upon the nicks with American Star, Hambletonian, Morgan, Clay, and Mambrino Patchen mares; but Blue Bull from the farm mares of Indiana was the first sire of his day to put fifty or more into the list.

Blue Bull has been neglected, slandered, and lied about as but few, if any, sires ever were; but he will yet live on, be better known and appreciated in his later descendants, as one of the great speed elements of the American trotter.

All things considered, this doubtfully bred and wonderful horse must be set down as one of the greatest of trotting progenitors. He was foaled in 1866 and lived almost his entire life in Rush County, Indiana, at James Wilson's "Flat Rock Stock Farm," from which he derived the title of "The Hero of Flat Rock." He died on the 11th day of July, 1880.

Many versions of his breeding have been given, but, in the opinion of the author, none are correct. Despite his plebeian blood lines, as recorded, a knee broken from the kick of a mule, an eye knocked out by a drunken groom, and one or more seasons spent as a teaser for a Jack, he has founded a family of trotters of quality and numbers more than equal to any stallion with the same opportunities.

Another peculiar fact is that while he was a fast pacer himself and was bred to pacing bred mares, he almost invariably got square trotters, and has now fifty-four trotters in the 2.30 list with records from 2.17¼ up.

He has twenty-six producing sons that have begotten standard performers and thirty-six daughters that are the dams of 2.30 performers.

Succeeding generations also show material gains, giving ample proof of the breeding-on capacity of the blood of the plebeian pacer.

Blue Bull sired the dam of Roy Wilkes, 2.08¼; Fred Arthur, 2.14¼; Puritan, 2.16; Vitello, 2.16¾; Lowland Girl, 2.19½; Luella, 2.19¾; Elgin Girl, 2.20½, and the Rhodenkiel mare, dam of Blanche Wayne, etc. Below will be found a complete official

statement of the descendants of this great sire in the speed ranks of the American trotter.

BLUE BULL, 75, SIRE OF

Zoe B.,	2.17¼	Daisy Blackwood,	2.29¼
Bessie,	2.17½	Dr. Sheppard,	2.29¼
Lena Swallow,	2.19	Gen. Russ,	2.29¼
Royal Bounce,	2 19	James Halfpenny,	2.29¼
Will Cody,	2.19½	Joseph,	2.29¼
Dick Stauffer,	2.29¼	Kate Bennett,	2.29¼
Silverton,	2 20¼	Texas Jack,	2.29¼
Chance,	2.20½	Dayton Belle,	2.29¾
Lucy Fry,	2.20¾	Ella Wilson,	2.30
Richard,	2.21	Ira M,	2.30
Mamie,	2.21¼	Little Wonder,	2.30
Florence M.,	2.22¼	Purity,	2.30
Gladiator,	2.22¼	Georgetown, p.,	2.16¼
Elsie Good,	2.22½	Tony Boy, p.,	2.20½
Bulwer,	2.23	Jenny K., p.,	2.22¼
Ethel,	2.23	Dandy Boy, p.,	2.22½
Kate McCall,	2.23	Hattie Shawhan, p.,	2.24½
May Bird,	2.23	and dams of	
Bertha,	2.23¼	Mark Sirius,	2.13
St Denis,	2.23¼	Leta C.,	2.16¾
Belle Wilson,	2.23½	Lowland Girl,	2.19½
Lena Guffin,	2.23½	Redmont,	2.21
Otto K.,	2.24¼	Champion Wilkes, s. t. b.,	2.22¼
Ina G.,	2.24½	Charles H. Hoyt,	2.22¼
Kate Hall,	2.24½	Ora,	2.23½
True Blue,	2.25	Ilma Cossack,	2.24¾
Hoosier Girl,	2.25¾	Maj. Ross,	2.25
Russell,	2.26	Lady Elgin,	2 25¼
Blanche H.,	2.26¼	Flossy,	2.25½
Blue Bell,	2.26¼	Big Mack,	2.25¾
Blue Bull (Grove's),	2.26¼	Violin, s. t. b.,	2.25¾
Commander,	2 26¼	Highland Mary,	2.26
Edward B.,	2.26½	O K,	2.26¼
Mila C.,	2.26½	Pilot W.,	2.26½
Dom Pedro,	2.27	Charley Burch,	2.26¾
Alice Peyton,	2.27½	Turk, s. t. b.,	2.27
Mattie H.,	2 27½	Billy Worthington,	2.27¼
Molly Kistler,	2.27½	Harry W.,	2.27¼
Beauty,	2.28	Merlin,	2.27¼
Bullion,	2.28	Joe Jefferson,	2.27¾
Myrtella G.,	2.28	Hero,	2.28
Rocket,	2.28	Della McGee,	2.28
Stewart Mac,	2.28	Polka Dot,	2.28

Agitator, ... 2.28½
Bandoline, ... 2.28½
Brunswick, . . . 2.28½
Alcavala, ... 2.29
Highland Maid, . . . 2.29¼
Black Wilkes, . . . 2.29¼
David R., ... 2.29¼
Flode Holden, . . . 2.29¼
Harry Laird, . . . 2.29¼
Anna Mace, . . . 2.29½
Little Nell, ... 2.29½
Fannette, ... 2.29¾
Addie C., ... 2.30
Belle Untrue, . . . 2 30
Roscoe Conklin, . . . 2.30
Atlantic King, p., . . 2.09¾
Vitello, p., ... 2.11¼
Mary Centlivre, p., . . 2.12
Strathso, p., . . . 2.13
Alhambra, p., . . . 2.14¼
Bee Jax, p., . . . 2.14¼
Fred Arthur, p., . . . 2.14¼
Ada, p., ... 2.15¼
Leverone, p., . . . 2.16
Maj. Wilkes, p., . . . 2.16¼
Lucy Pan, p., 3, . . . 2.17
Bas Bleu Wilkes, p., . . 2.18¾
Princess, p., . . . 2.19¾
Elgin Girl, p., . . . 2.20½
Nelly B., p., . . . 2.21
Arctic, p., ... 2.21¼
Pharos, p., ... 2.21¼
Dick Wright, p , . . 2.23¼
Joe Rowell, p., . . . 2.23½
Lex, p., ... 2 23½
Euphony, p., . . . 2.23¾
Strathwayne, p., . . . 2.24¼
Big Wonder, p., . . . 2.25
Trevor, p., s. t. b., . . 2.25

PRODUCING SONS OF BLUE BULL.

Billy Davis.
Sunset, p., . . . 2.16¼
Billy Hinsley.
M. W., ... 2.20¼
Billy Wilson.
Sir Gay, ... 2.26½
Blue Bull, 15660.
Jennie B., . . . 2.29½
Blue Bull, Jr., 2878.
Nettie, ... 2.19
Lottie P., p., . . . 2 17¼
Lottie K., p., . . . 2.25
and dam of
Belle Acton, p., 1, . . 2 20¾
Blue Bull (Hunt's).
Dick H., ... 2.29¼
Nellie Turner, p., . . 2.23¾
Blue Bull (Phillips').
Alti, p., ... 2.19¼
Blue Bull (Scott's).
Sire of dam of
Ida, ... 2.29½
Blueskin, 3921.
Bullmont, p., . . 2.16
Blue Vein, 5466.
Country Girl, p., . . 2.15¾
Osceola, p., . . . 2.18
and dams of
Jesse Hanson, . . . 2.16¾
Pearl Winship, . . 2.23¼
Bonnie Doon, 5322.
Cuba, ... 2.25½
Brussels, 11043.
Allen B., ... 2.20¼
Frazer, ... 2.29½
Spurrior Boy, . . . 2.30
Bullion, 6030.
Barbarine, . . . 2.27½
Ned B., p , . . . 2.32¾
and dam of
Lady Bullion, . . . 2.16¾
Capt. Bogardus, 4246.
Surprise, ... 2.24½
Paddy Collins, . . . 2 29¼
Sunrise, p., . . . 2.20½
Col. Howe, 14130.
Mascot Bob, . . . 2.29¼

Commander, 2041.
Nelly S., . . . 2.23
Sorrel Dan, p., . . 2.18¼
Henry F., p., . . . 2.20¼
Annie C., p., . . . 2.23¼

George Hall, 2391.
Dr. Frank, . . . 2.27½
and dam of
Emma Noland, p., . . 2.24¾

Gloster.
Dick C., p., . . . 2.18¾
Addie C., p., . . . 2.20

Greenback, 3884.
John M., ... 2.27½
Fred Ager, p., . . . 2.24½

Harry B., 4309.
Morning Glory, . . 2.30

Headlight, 2908.
Billy Golden, p . . . 2.21

Jim Wilson, 12088
Belle Wilson, . . . 2.20
Boone Wilson (p 2.13), . 2.20½
Pawnee, ... 2.21¾
Irma C. (p. 2.18), . . 2.23¼
Ironwood, . . . 2.23¼
Johnny Bull, . . . 2.27
Daisy S., p., . . . 2.17¾
Emerick Wilson, p , . 2.23½
Jim Blaine, p., . . 2.25

John Black.
Sire of dam of
Eura, ... 2.19¼

Jot C.
Montephister, . . . 2.29
Hy Dy, p., . . . 2 23¼

Judge Craven, 16887.
Carrie L., . . . 2.29

Little Henry, 3883.
Susie G., p., . . . 2.15½

Little Wonder, 1304.
Lady Wonder, . . . 2.25
Everett M., p., . . 2.19½

Lockerbie, 9255.
Maud Muller, . . . 2.20¼
Allie L., p., . . . 2.15½

Prompter, 2305.
Apex, ... 2.26
Transit, 3, . . . 2.26½
Lucky B., . . . 2.30
Creole, p., . . . 2.15
Walker, p., . . . 2.23½

Redwood, 2.34¼.
Sire of dam of
Capt. Wilkes, . . . 2.26¼
Redwood Wilkes, . . 2.30

Rocket, 12033.
True, p , ... 2.23¾

Rushville, 3303.
Gipsey Queen, . . . 2.19¾
Dusty Heels, . . . 2.27¼
Blucher, ... 2.29¼

St. Nicholas, 4070.
St. Lewis, . . . 2.21½

St. Omar, 4557.
Johnnie B., . . . 2.27¼
Chapman, p., . . . 2.19½
and dams of
Lula, ... 2.27½
Atlantic Gift, . . . 2.28¼
Sankey, p., . . 2.25

Tobe, Jr., 16674.
Franklin, ... 2.19½
and dam of
Nelly McCrory, 3, . . 2.18¼

Wonder, 2697.
Susie Wonder, p., . . 2.19½
and dam of
Lulu McCurdy, p., . . 2.14¼

Zach Chandler, 2028.
Ellis, ... 2.26¼

SIRES WHOSE DAMS ARE BY BLUE BULL.

BELDEN BOY, 3020.
Belton, ... 2.25½
DECORATE, 16831.
Delegate, ... 2.29¼
ELGIN BOY, 4620.
Nelly Lloyd, . . . 2.22½
Harry Jones, p., . . 2.18¼
Edwin O., p., . . . 2.20
Pearl L., p., . . . 2.23
Lucille, p., . . . 2.24½
JIM MONROE, JR., 4583.
Bessie Polk, p., . . 2.25
KENTUCKY VOLUNTEER, 2784.
Harvey, ... 2.21
Vera, ... 2.25
S. S., ... 2.29½
Benteer, ... 2 30
Vollula, p., . . . 2.15¾
Maritana, p., . . . 2.20¼
LEGAL NOTE.
Jersey Girl, p., . . 2.20½
Blue Note, p., . . . 2.22¼
LEX, 8255.
Six Forty, p., . . . 2.25
PHAROS, 3877.
Pharon, ... 2.18
POCAHONTAS SAM, 9106.
Billy E., ... 2.29½
Touch-Me-Not, p., . . 2.13
Zeigler, p., . . . 2.13¾
Pixley Boy, p., . . 2.15
Poca Eagle, p., . . 2.21½
QUILNA CHIEF, 3875.
David Copperfield, p., . 2.16
Dick Wright, p., . . 2.23¼
Bay Leaf, p., . . . 2.24¼
Ben F., p., . . . 2.24½
RED MONT.
Lottie Rocket, p., . . 2.18¼
ROSCOE CONKLING, 8035.
Senator Conkling, . . 2.12¾
Judd's Baby, . . . 2.19¼
May Conkling, . . 2.28
TURK, 15213.
Crepe McNett, s. t. b., . 2.28¼

PERFORMERS WHOSE SECOND DAMS ARE BY BLUE BULL.

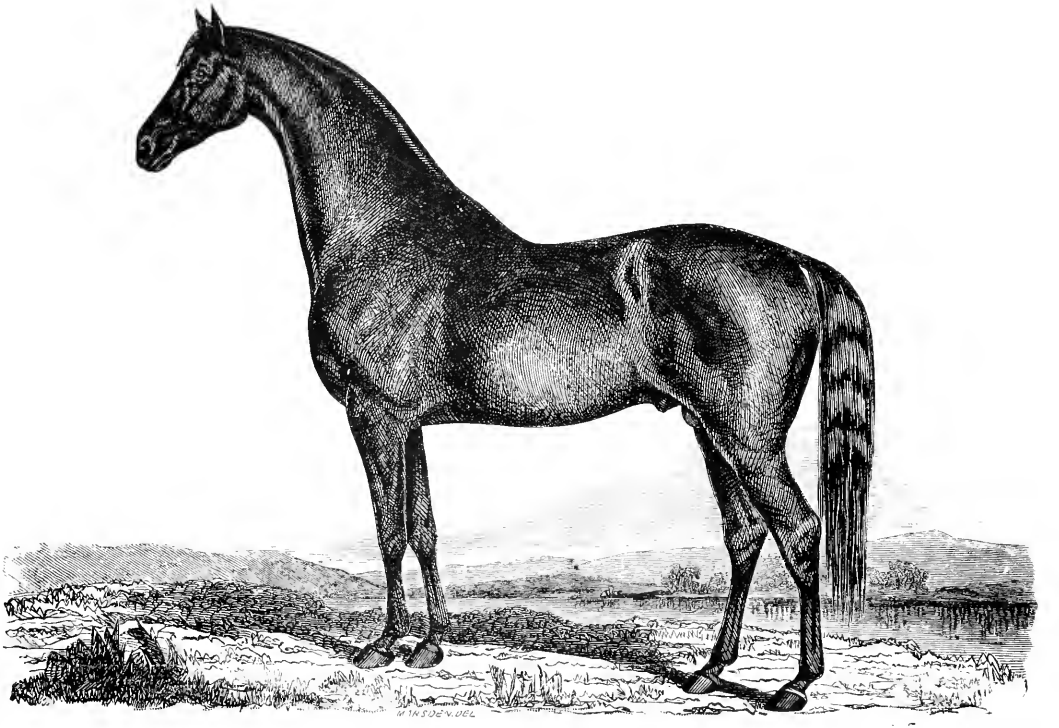
Czar, 3, ... 2.12½
Eura, ... 2.19¼
Dancourt, ... 2.21¼
VanBuren Wilkes, s. t. b., . 2.21½
Lambert B., s. t. b., . . 2.22¼
Rosemont, s. t. b., . . 2.23½
Gen. Alger, . . . 2.24
Harold Chief, . . . 2.24¼
Phallamont Boy, . . 2.24¼
Nelly F., ... 2 25
Michigan Prince, . . 2 26¾
Sunlight, ... 2.27
Amberlow, ... 2.27¼
Golita, ... 2.27¼
Phallamont Girl, . . 2.27¾
Old Judge, s. t. b., . . 2.29¼
Prince Brino, . . . 2.29¼
Witch Hazel, . . . 2.29½
Henry F., p., . . . 2.13¼
Baron Bel, p., . . . 2.17¾
Lebbas, 1, p., . . . 2.18
Sadie H., p., . . . 2.20¼
Bacon, p., ... 2.23

OTHER DESCENDANTS.

Lambert B., . . . 2.22¼
Long John, ... 2.28½
Clairmont, ... 2 23¾
Ida, ... 2.29½

RECAPITULATION.

Standard performers,	60
Sons (34) with,	66
Daughters have produced,	64
Mares by sons have produced,	14
Sires out of daughters (13) with,	32
Daughters have produced the dams of,	23
Other descendants,	4
Total,	263



VERMONT BLACK HAWK.

Founder of the Black Hawk family of Morgans; foaled in 1833; died 1856; one of the greatest sires of his day.

CHAPTER XII.

THE AMERICAN TROTTING HORSE.

As a breed — Component parts constituting the breed — Establish the American thoroughbred Trotter — As he should be bred — Breed for beauty, brains, and business — Breeding the trotter a progressive science — An American product — Chance trotters — Racing in early days — The two-minute horse.

THE American Trotting Horse as a breed, according to the author's ideas of what constitutes a breed (see Breed, Chapter I), may be said to be scarcely fairly established, and is composed mainly of the following families, *viz.:* The Hambletonian family, which is subdivided into many branches, embracing the Electioneers, Abdallahs — descendants of Alexander's Abdallah — Volunteers, Wilkes, Harolds, Dictators, Egberts, Strathmores, etc.; some of which are again subdivided, as the Almonts, Belmonts, Nutwoods, Sprague, etc., yet all grouped and classed as Hambletonians. And the Morgan family, descendants of old Justin Morgan, and which are also divided into other branches, embracing the Black Hawks, Ethan Allens, Lamberts, Morrells, Fearnaughts, Magna-Chartas, Gold-Dusts, and Herods — all claimed as Morgans.

Also the Bashaw family, which are descendants of the imported Arabian horse, Grand Bashaw, and are subdivided into and embrace the Clays, Patchens, and Bashaws of the present day; and the Blue Bulls, embracing all descendants of that one of the most remarkable of all American-bred stallions, as the sire of speed from common mares — Wilson's Blue Bull; together with the Mambrinos, also descended from Messenger through Mambrino, who sired Mambrino Paymaster — the sire of Mambrino Chief — (whose dam was a large, coarse, Western mare, pedigree unknown) and who sired six trotters and

twenty-three sires of eighty-seven trotters and seventeen dams of twenty-three trotters, and to whom some of our best trotters of the present day trace mainly through their dams.

With occasional selections from the best thoroughbreds and from the French Canadian horse, whose blood has commingled through the above families, we have to-day a breed of American horses of a strictly American production, of which every true American may justly feel proud.

And now the time is upon us when we, as breeders of the American Trotter, can prosecute and advance our business successfully, I think, by judicious selections in breeding from our own acquired material without any further out-crosses.

In fact, to step outside in crossing for the production of the American Trotter, is taking a backward step. I think we have now reached — quite recently, perhaps — the period in American trotting horse breeding when foreign blood is no longer needed in the trotter, any more than by the thoroughbred runner.

What we should now aim to establish is a national thoroughbred trotting horse. As American breeders, we should, by wise selections and careful breeding, establish a breed of American horses the most desirable and most valuable of any breed of horses in the whole world. We certainly have the foundation elements for such a breed, and the results rest alone with the skill of the American breeder.

Admitting that the American Trotter owes everything of value — excepting the trotting gait — to the thoroughbred and his ancestors, the Arabian and the Barb (for from these sources are derived courage, speed, and endurance), the great question of the day among horse breeders is whether we already have enough of this in our American Trotter, or whether it is policy to add more.

My own opinion, based upon observation and experience, is that we should now stop experimenting with outside issues and attend strictly to the business of prosecuting this great work of thoroughly establishing this national horse, the American

Trotter, and that we can no longer afford to experiment with outside issues or outside breeds or families.

The trotting-bred horse is not an animal simply for racing or for wealthy gentlemen to drive fast on the road, but he raises the general standard of the horse for all work. I used trotting-bred horses for heavy farm work on clay land in Indiana with greater success than with heavier, cold-blooded mongrels.

Their quick stride and great endurance is apparent to any observer. They are capable of a greater amount of work, and will do it quicker and much more intelligently than the horse without breeding; and, as a horse's capacities for work are increased, his value is accordingly increased.

There are but two nations of the earth that possess a race of animals known as the trotting horse. One of these nations is Russia, the other is America. In the first-named country we find an animal proceeding from the Arabian, crossed, it is said, upon the Flanders stock, and called the Orlof trotter. It is certain that this animal is a Russian production, while the American Trotter is surely an American production.

The American Trotter, as he should be bred, and what our market demands, is a horse of good size, style, and action; a handsome horse, and, above all, of good disposition and sound constitution.

Then, if he can be trained to trot in 2.20 or less, he may be used for pleasure or for gambling purposes. Failing to be fast enough for track purposes, he is still a useful and profitable animal for the use of man, and his breeding is not a failure.

But if we breed for speed alone, without the other considerations, and get a little animal that is not a fast trotter, what then? Why, we have an animal that is of but little use to the breeder and that no one wants to purchase at any price. The breeders of such animals soon become overstocked, and the cry goes forth that the bottom has fallen out of the breeding business, whereas it is only the false bottom that has dropped out.

Breed horses for beauty, brains, and business. Beauty always attracts customers who pay the highest prices. Brains, exhibited in good "horse sense," is an important factor in a horse for any purpose. A good pedigree is very valuable provided you have an animal to match it. Standard bred horses, eligible to registration as such, without an animal to correspond to the pedigree (as often witnessed in combination sales when highly bred animals sell for less than half enough to pay for their siring), is a deplorable state of things and very discouraging to the breeder.

There are scores of horses in this country, which, from their individual merits and breeding, are evidently equal to the best, but which are reckoned "no good" simply because they were never trained for speed.

Great horses, like great men, live on for years after their death; and, like great men, often spring up from obscurity, as was the case of Columbus, the founder of the Columbus family, of Pilot, the founder of the Pilot family, and Blue Bull, the great Indiana progenitor of speed.

The ignorance of the American public — and of the world — in not knowing the full breeding of these great horses, as was the case with Justin Morgan, don't go to show that they were not well bred, but that, like the Narragansett Pacer, their breeding has not been handed down to us through history, but lies locked up in the brains of those of their day, most of whom are no longer with us.

The breeder who breeds for speed alone is as much a speculator as he who plays the Board of Trade. Because Williams raised an Allerton and an Axtell, hundreds of small breeders imagine they are capable of obtaining the same results.

Speed is a valuable adjunct in the sale of any horse, and, when added to beauty, size, and good disposition, makes the animal most desirable in the eyes of the purchasing public.

Breeding the American Trotter is a progressive science, the limits of which are, as yet, by no means achieved.

Among the lovers, breeders, and patrons of the American

Trotters that have during the past twenty-five years ridden away from us by the side of the pale horseman, down into the valley and through the shadow into the light beyond, memory records so many that I will not attempt to individualize them here.

Nearly 100 years of breeding for speed at the trot, guided by close observation of actual performances, coupled with an intelligent course of breeding from animals possessing speed at that gait, has resulted in evolving an animal high in intelligence, quick in action, and beautiful to look upon.

We still have much to do before we can justly claim to have established a breed of universal trotting horses, and the closer we confine ourselves to the judicious selections from such families as trot and produce trotters, the sooner we shall accomplish our object.

The American Trotter is an American production made up of several breeds, but receiving his best blood from the Arab and the thoroughbred, and through them we have the foundation, by careful selection and breeding to the "fittest," of perfecting a breed that will soon become famous over the whole civilized world, and that will give us a national reputation as well.

But the time is upon us when the breeder who introduces a single out-cross from an inherent trotting gait, not only adds his possibilities of failure, but postpones the day when we shall be able to breed fast trotters with a degree of certainty.

The American trotting horse has grown out of the selections made by breeders of the animals that could trot fast, and that had intelligence, when taught, to stick to that gait. Such as were, to use a horse expression, "level headed."

Chance trotters may occasionally be produced in the future as in the past, but the careful breeder of trotters will select for his harem mares not only of those possessing good trotting action themselves, but of families where the trotting gait has been successfully cultivated by selection and use until inherit-

ance has commenced to lend its powerful aid in transmitting what was originally a spontaneous effusion.

The rapid stride that trotting horse breeding has taken may be imagined from the fact that thirty-five years ago Vermont Black Hawk with three trotters in the 2.30 list was the champion trotting sire of the world. When nineteen years old, Ethan Allen, with four in the list, was the champion trotting sire, while now we have five-year-old stallions with more in the list.

There can be no great national success in the breeding of horses, beyond profitable home consumption, until such breeding shall be demanded by other civilized people for stock and breeding purposes; consequently, we should aim to create and establish a truly "American Trotting Horse" of value from its blood qualities for export.

So universal is the fancy for fast driving horses that at almost all our fairs and horse shows the roadster class will be found to be more largely represented than any other, and usually more so than all other classes combined. The time is fast approaching when the American Trotting Horse will be classed as a distinct breed, the creation of an American fancy, just as the thoroughbred running horse was a creation of the English.

To the student of breeding, who revels in tracing the influence of the fusion of blood elements, there is not a more curious, amusing, and instructive study than the history of the American Trotting Horse of the period.

Being created out of vastly divergent blood elements, bringing with them widely different characteristics and talents, and also suffering under conflicting theories of breeding, the American Trotter emerges to-day, an almost distinct breed, differing from all others, no matter what their nationality, chiefly in the perpetuating of the qualities and the height of his development. The result is, indeed, wonderful, considering the various sources that have been utilized, the foundation stock of which was undoubtedly well advanced

in progress before the advent of Messenger, although at present the idea is almost universally held that the history of the standard bred American Trotter begins with the advent of Messenger in America.

But while I do not desire to belittle the influence of this horse, Messenger, I believe we had already, in America, previous to his importation, a good foundation trotting stock, especially in the New England States, derived from the former importations of the Arabian and thoroughbred stock, and also from the Narragansett Pacer, which, as a breed, contributed much to the early fusions that resulted in the trotter, which completely supplanted them before the beginning of the present century. (See Narragansett Pacer, Chapter IV.)

Racing of all kinds was common in those early days. Writing about Rhode Island in 1735, Rev. James McSparron observes that he has seen some of these pacers "pace a mile in a little more than two minutes and a little less than three."

It appears from this that the timers of those days were not so particular as to split seconds or really to count them in a horse race.

The first demand for trotters seems to have sprung up in Connecticut, where horses advertised for sale in the newspapers of seventy-five years ago sometimes had reference to their trotting qualities; and history points to a time when Connecticut found a market for her fast trotters among the wealthy planters of the West Indies, who, it seems, were at that time acquiring a taste for this kind of sport. But the fast trotters of that period would hardly be reckoned as such at the present time.

When the trotting horse "Yankee" made a record of 2.59, he astonished the world, as well as the unlucky man that had bet heavily that no horse could beat three minutes.

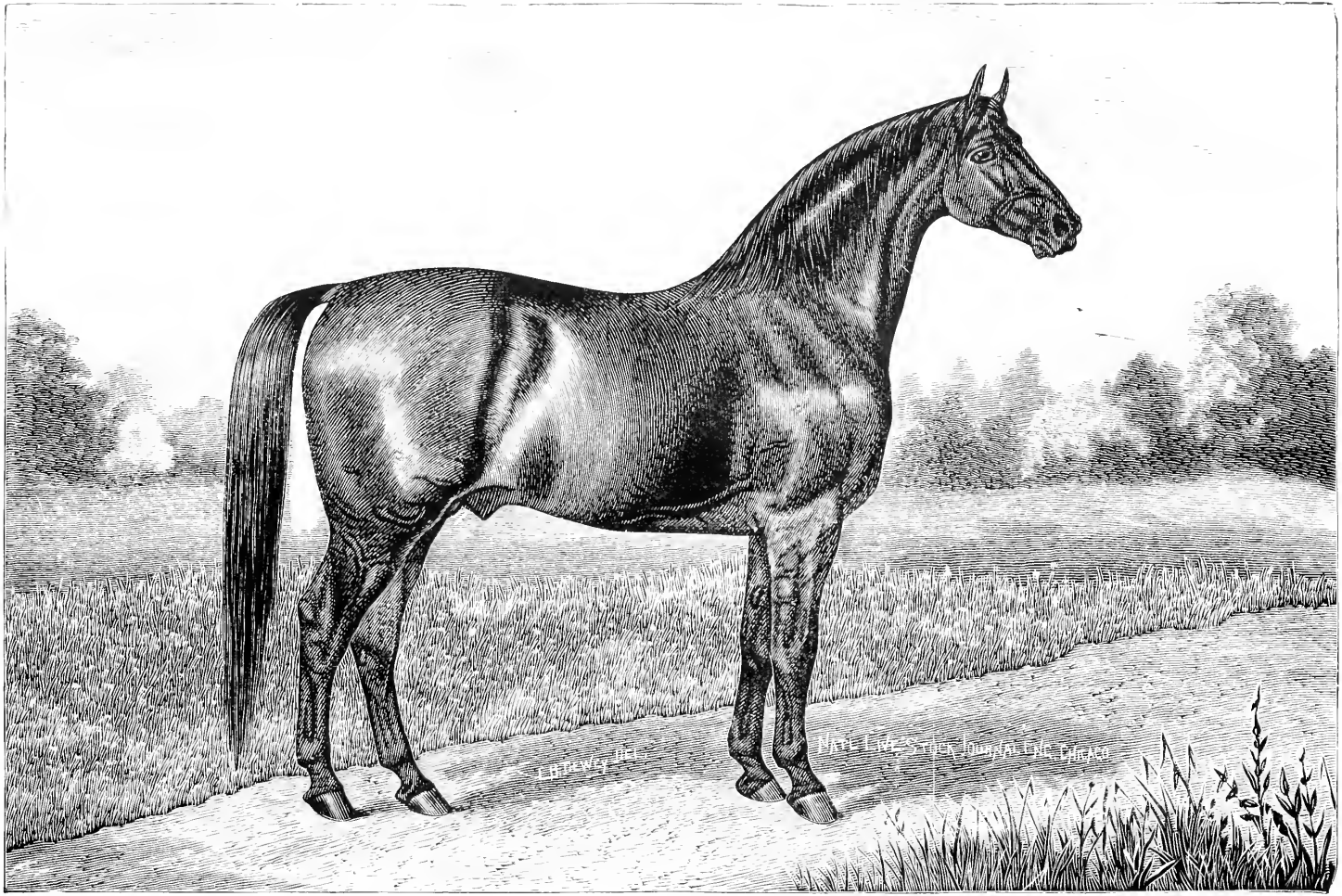
It was many years later when Topgallant brought the record down to 2.40, and in 1843 Lady Suffolk lowered it to 2.28. Thirteen years later, in 1856, Flora Temple dropped it to 2.24¼ and in 1859 to 2.19¾. It then took seven years more

to bring out a Dexter capable of reducing this fastest time record only 1¾ seconds, placing it at 2.18, and one year more to reach 2.17¼. It took four years more to get off that quarter of a second, which was done by Goldsmith Maid, who finally reduced it to 2.14. Eight years more of breeding and training brought out Rarus, who reduced the record in 1878 to 2.13¼. St. Julian, a year later, got off another half second and Maud S. took off a few more, reducing the time to 2.08¾, which record she held as Queen of the trotting turf from 1885 to 1891, when, with greatly improved tracks, sulkies, and trotting appliances, she was compelled to lay down the crown; while to-day Alix holds the trotting record of 2.03¾.

Seventy-five or eighty years ago no one could have been made to believe for a moment that a horse could ever trot a full mile inside of three minutes; but now it is confidently expected that an American trotter will make a mile in two minutes.

In 1843 there were but two horses in America that could trot a mile in 2.30, while in 1881 there were over twelve hundred that could do it. In this country, we, as American horse breeders, have not been satisfied to raise horses that would beat our neighbors' horses, but have been trying to beat "Old Father Time" himself.

The time has passed when horses can command long prices on breeding and performances alone; they must combine with speed and good breeding, good looks and symmetrical conformation, coupled with size sufficient to enable them to become useful servants to man, in case their owners, like myself, are not sporting men; and the market calls for fast road, carriage, and business horses, instead of fast trotters for sport or gambling purposes alone.



CLEVELAND BAY STALLION, MARMION.

Imp. and owned by Geo. E. Brown of Decatur, Texas.

CHAPTER XIII.

CLEVELAND BAY.

Origin and especial merits — As now bred — Demand in this country — French coach horses — The government stud of France — Wonderful knee action — Color.

IN conformation and general appearance these horses show a wonderful similarity, and this fact, added to their large size, great style, and fine dispositions, made them at an early day the carriage or park horse of the English aristocracy. The larger and heavier ones were selected to pull the old-fashioned English coaches across the country at the time when railways were unknown.

The fertile district of Cleveland, from whence this breed takes its name, became famous for their production, and for years they were bred with the greatest care and discretion. Later on, when coaching became a thing of the past, this breed was neglected. The mares were bred to thoroughbred horses to produce saddle horses, hunters, and cavalry mounts. They gave greater size and more bone than the thoroughbred possessed, while their fine proportions and style made them easily matched for carriage horses. Originally, it is said, the Cleveland Bay was a large and rather coarse horse compared to that breed of the present day, as remodeled and reconstructed by the mingling of thoroughbred blood.

The original Cleveland Bays were frequently seventeen hands high and usually weighed from 1,500 to 1,700 pounds. These large horses were fined down by judicious crossings, the thoroughbred being used largely for the purpose, until in form and general appearance they were models of elegant proportion and symmetry.

The demand which has sprung up in this country within

the last fifteen or twenty years for well-matched and stylish carriage teams, again directed attention to the Cleveland Bay as most likely to supply such horses as were demanded. The purchase of a number of them in the last few years by Americans has led the English breeders to take steps to revive their breeding in that country, and an association has been formed issuing a stud book in which all horses of the breed deemed worthy are to be registered.

The Cleveland Bay, as now bred, is a horse of sixteen to sixteen and three-quarters hands high and weighs from 1,300 to 1,500 pounds. In color they are generally bay with black points, but sometimes dappled bay with occasional browns and dappled browns, always with black points. Originally they were nearly universally bay in color, and were said to be as near alike in color as Devon cattle; but the use of the thoroughbred stallions has introduced somewhat of a change in this respect. They should, however, be free from white markings, always with black points and of one of the colors mentioned above.

The head should be fine, the eyes large and prominent, the ears well apart and fine, the neck well arched and set on strong, oblique shoulders; the chest deep, rather than broad, partaking more of the shape of the race-horse than of the draft; the back short, quarters long and well-rounded; the legs clean, strong, symmetrical; and the feet always perfect.

Sanders, in his excellent work entitled "Horse Breeding," published in 1885, speaks of the Cleveland Bay of to-day as being created anew, as was the breed when it was formerly considered a breed, by the mingling of the blood of the thoroughbred race-horse with that of the large bay mares of Yorkshire; and that the old Cleveland Bay has become extinct as a breed. Yet he says: "I am free to admit that there is still much stock remaining in that region possessing the old Cleveland characteristics, and perhaps much of the blood that formerly belonged to this breed, and it is evident that the same course of breeding which originally formed the breed might

speedily restore it from the material now remaining in that country as well as this, *viz.*, the use of stout, strong, stylish thoroughbred sires, upon large, active, and stylish bay mares."

The "National Cyclopedia," in speaking of the Cleveland Bay, says: "Since the beginning of the present century very many modifications of this horse have been accomplished by crossings and selections, which, while preserving all the good points of the Cleveland Bay, have so modified them that to-day, it is said, there is not an animal to be found — even in the east riding district of Yorkshire — of the pure, unmixed, and unimproved blood."

"The improvement has been brought about by crossing staunch thoroughbreds upon the original stock, and by selection, so that they are now acknowledged to stand as a type of all that is excellent in a horse of medium weight (1,200 to 1,400 pounds), from fifteen and one-half to sixteen and one-half hands high, combining style, muscular activity, spirit, bottom and good-form in an eminent degree."

They are constantly gaining favor, it is said, in England, where they breed horses for light and medium hauling carriage horses, and all work where style and muscle are especially required. The crest and withers are almost invariably good; the head bony, lean, and well set on. Ewe necks are probably rarer in this horse than in any other family, unless it be the English dray horse, in which it is never seen.

Messrs. George E. Brown & Co., of Aurora, Ill., were among the earliest importers in this country who recognized the merits of the breed.

This breed of horses is popular in some sections of the United States of America as a foundation upon which to build coach and carriage horses of good color and style, by crossing the mares of this breed upon the American trotting horse, thereby adding speed to the size and beauty of the Clevelands.

FRENCH COACH HORSE.

For the following information regarding the French coach horse I am indebted to the kindness of the editor of their "Stud Book":

"The following history of the government studs of France, and their effect upon the horses of that country will give a person a fair idea of the quality of horses the scientific breeder of later periods were provided with; from which, by mingling the blood of the Arab, Barb, and thoroughbred, they formed that magnificent race of coach horses that so admirably meets the demands of the fastidious purchasers of high-stepping, fine-styled, smooth-formed horses of sufficient weight to draw the heavy European coaches of the present day.

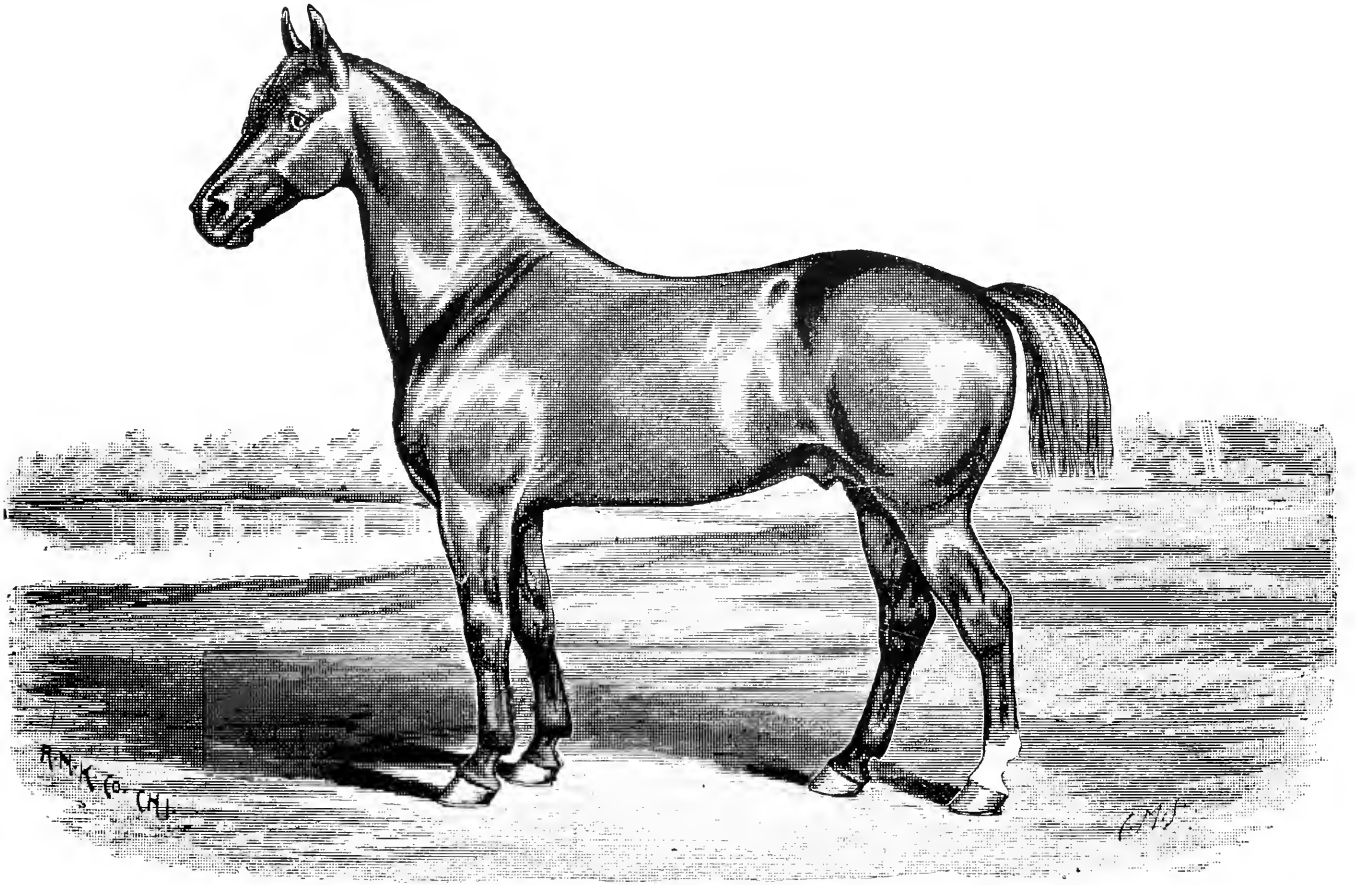
"The liberal aid in supplying the finest stallions, the generous encouragement extended to the breeders of fine horses by the government in France since the establishment of the Government Stud Book by Louis Phillip in 1833, has done much to secure that combination of power, elegance, and endurance that has placed the French coach horse in the front rank of excellence among the carriage breeds of the world.

The need of this class of horses in America has been grievously felt, and the demand for them is constantly increasing, and their raising will undoubtedly prove a lucrative branch of horse breeding. The eagerness that information is sought after on the subject is the best evidence that we can have that the introduction of French coachers into America will meet with a favorable reception.

THE GOVERNMENT STUDS OF FRANCE.

"The French government has taken an interest in the improvement of horses never equaled by that of any other nation.

"That the French people have from the earliest periods been ardent lovers of equine perfection is evinced in the early superiority of the horses of that country, and the popularity of every move made by the government tending towards their improvement.



INTACT, FRENCH COACH HORSE.
Imported and owned by Powell Bros., Shadeland, Pa.

"As early as the middle ages the horse of France had a recognized superiority over those of any other country, which may be partially attributed to its peculiar system of government.

"Upon the accession of Hugh Capet, in the tenth century, France was divided into about 70,000 fiefs, governed by nobles. The constant dissensions among these petty lords made a military education a necessity for self-protection. In those days of chivalry, when the success of a battle depended chiefly upon the prowess of mounted knights, the strength and endurance of their horses was of more importance and more highly appreciated than at any other period of the world's history. Under these necessities a most powerful and intense impulse was given to the development of horses suited to the requirements of the period.

"We thus see in the feudal ages the improvement of horses based upon individual necessity, but as this system disappeared in the centralization of the government in the crown, the powers of the state slowly absorbing feudal sovereignty, the government itself became interested in all movements tending toward the production of a superior class of horses, so necessary at that time for a thorough military equipment, upon which its safety depended.

"The most effective and energetic action in establishing permanent government studs was taken under the administration of the great French minister, Colbert, in 1665, and was so well managed that in 1690 statistics show the number of royal and approved stallions, standing in France, to be 1,600. The government stallions kept at the Haras were called the King's stallions, and were selected from among the best and finest breeds found in France, and many were brought from Barbary, Turkey, Spain, and later from England. The approved stallions were the produce of government stallions and the best mares of the country.

"Two large government Haras were established by Louis V,

that of Pin, 1714, located near the borders of La Perche, which was the first and largest establishment of its kind ever established, and where the finest stallions belonging to the government have been kept up to the present day. It is to this establishment that the Percherons owe much of their superiority, as here was kept the Arab Gallipoli, from which is descended the famous Jean le Blanc (739), the progenitor of many of the finest Percherons of the present day. In 1775 the Haras of Pompadour were established with twelve depots, and placed under the superintendence of the administration of the Haras.

"In 1789, there were in France 3,239 approved and government stallions, which served, according to regulations, 115,000 mares, producing 55,000 living colts. From 1815 to 1833 the government bought for service in their studs 1,902 stallions; of these 223 came from Arabia and other foreign countries, 853 from the northern departments of France, principally from Calvados and La Perche, and 826 were selected from the finest of the improved breeds from government stallions. In 1831 a most noticeable advance was made toward the improvement of the light breeds suitable for coach and cavalry purposes, which was followed, in 1833, by a royal decree establishing a Government Stud Book for the preservation of pedigrees; this was placed under the supervision of the Minister of Agriculture. After the establishment of this stud-book more critical judgment was exercised in the selection of stallions for government use than ever before, and large prizes were offered for colts produced by the finest mares of the country. Since the establishment of this stud-book a very decided improvement has taken place in the character of the horses of the entire country, between 11,000 and 12,000 owned by the government having been recorded. No animal is given a number unless belonging to the government studs.

"May 5, 1870, the management of the government Haras or studs was vested in the Department of Agriculture and Commerce, under the immediate supervision of a director-

general, eight inspectors, twenty-six sub-directors, ten superintendents, and twenty-six veterinaries.

"In order to be eligible to an appointment to one of the above offices, the candidate must be a graduate of the Ecole de Haras du Pin, a school located at the Haras of Pin for the education of men to whom shall be confided the future management of this department of the government.

"In 1874 the number of stallions owned by the government throughout France was ordered increased 200 per year until they should reach 2,500, and the credit necessary for prizes awarded to breeding animals should reach 1,500,000 francs per annum, and a special sum of 50,000 francs per year was granted to make experiments with Arab and Anglo-Arab, and for this purpose sixty finely bred mares were placed at the Haras of Pompadour.

"In the organization by the government of the administration of the Haras, there has been one central object constantly kept in view, that is the encouragement of the people by every means possible to a higher standard of breeding, and at the same time to furnish them with the means by which to accomplish this object, by the introduction into every locality of the finest of the different breeds and types which are offered for use to the mare-owners at a nominal fee of service. These consist, first, of stallions owned by the government itself; second, stallions belonging to private individuals inspected and approved by the government, such approved stallions receiving from the government, as long as they are so kept, from 300 to 3,000 francs per annum, according to their breeding and superior excellence; third, authorized stallions, animals by government inspection are pronounced of good quality and worthy of public patronage. To farther prevent the use of inferior animals a decree was issued in 1885, excluding from public service all stallions not authorized by the government.

"By a decree of December 9, 1860, a subsidy, or prize, of from 100 to 600 francs each (according to breeding and quality) was authorized to be given to approved mares with colts by

government stallions. Besides this, large sums are given in prizes at the annual regional exhibitions and races held under the auspices of the government.

"We thus see the French government the most liberal patron of the breeder and the stallioner, but farther yet than this, it becomes an important factor in sustaining the prices of the finest types of all breeds, as the hundreds of stallions of the very highest order of merit that they are obliged to buy annually to supply the Haras, creates a constant demand for the best types at very high prices.

"The valuable qualities claimed for the French horses over those of other coach breeds are based upon a system of breeding not possessed by any other race.

"The breeding of all classes of domestic animals in every country is conducted by individual enterprize and the outgrowth of individual ideas. Therefore the fixity of type is greatly affected or destroyed altogether by the variety of opinions entertained by the large number of people of different tastes engaged in the breeding; hence, so general a lack of that uniformity of character so highly esteemed and so necessary in every successful breeding animal. The French Coach breed, instead of being the product of a multiplicity of ideas, has been developed under the exclusive guidance of the Director-General of the National Studs of France; and as these officials are educated in the same school from generation to generation, are taught to value the same form, seek for the same qualities, and pursue the same system, we can understand how it has been possible for them to attain such high perfection and great uniformity in the horses of the country. The power exercised by the Inspector-General is extraordinary, controlling, as he does, the selection of the 2,500 stallions owned exclusively by the government, and the thousands of others annually inspected, which must obtain his approval before receiving their permits and subsidy; and, further, all breeders are confined exclusively to the use of animals inspected and licensed by this department.

This places horse-breeding entirely under government control, as far as the stallions, which so greatly control results, can do.

"The coach stallions used in France are the descendants and possess a combination of the Arab and the French and English thoroughbreds. The most famous trotting families of this breed are the result of the mingling of the blood of the Norfolk trotters, a breed that, through Imported Belfounder, has given to American trotters much of their renown, imported Phenomenon in France corresponding to imported Belfounder in the United States.

"The uniting of all of the valuable qualities of the various breeds, and concentrating them through several generations under the direction of a single mind, has developed a race of such size and perfect symmetry, and a wonderful endurance that makes it possible for them to trot, as three and four-year-olds, the three to seven mile races common to that country. Although they do not attain the high speed of American Trotters, when we consider the size of the animals, many of them attaining a weight of 1,300 to 1,400 pounds in trotting condition, their cumbersome vehicles or heavy-weight riders and inferior tracks, we cannot but recognize that they possess qualities worthy of consideration.

"The National Studs are supplied with these stallions from various parts of France where the breed has attained its highest perfection. The mares are owned by the breeders of the country, and the stallions are in use by the government, which buys large numbers to keep up its supply.

"The finest of these horses are bred in the department of Calvados, where, in the fall of every year, the government purchases are made.

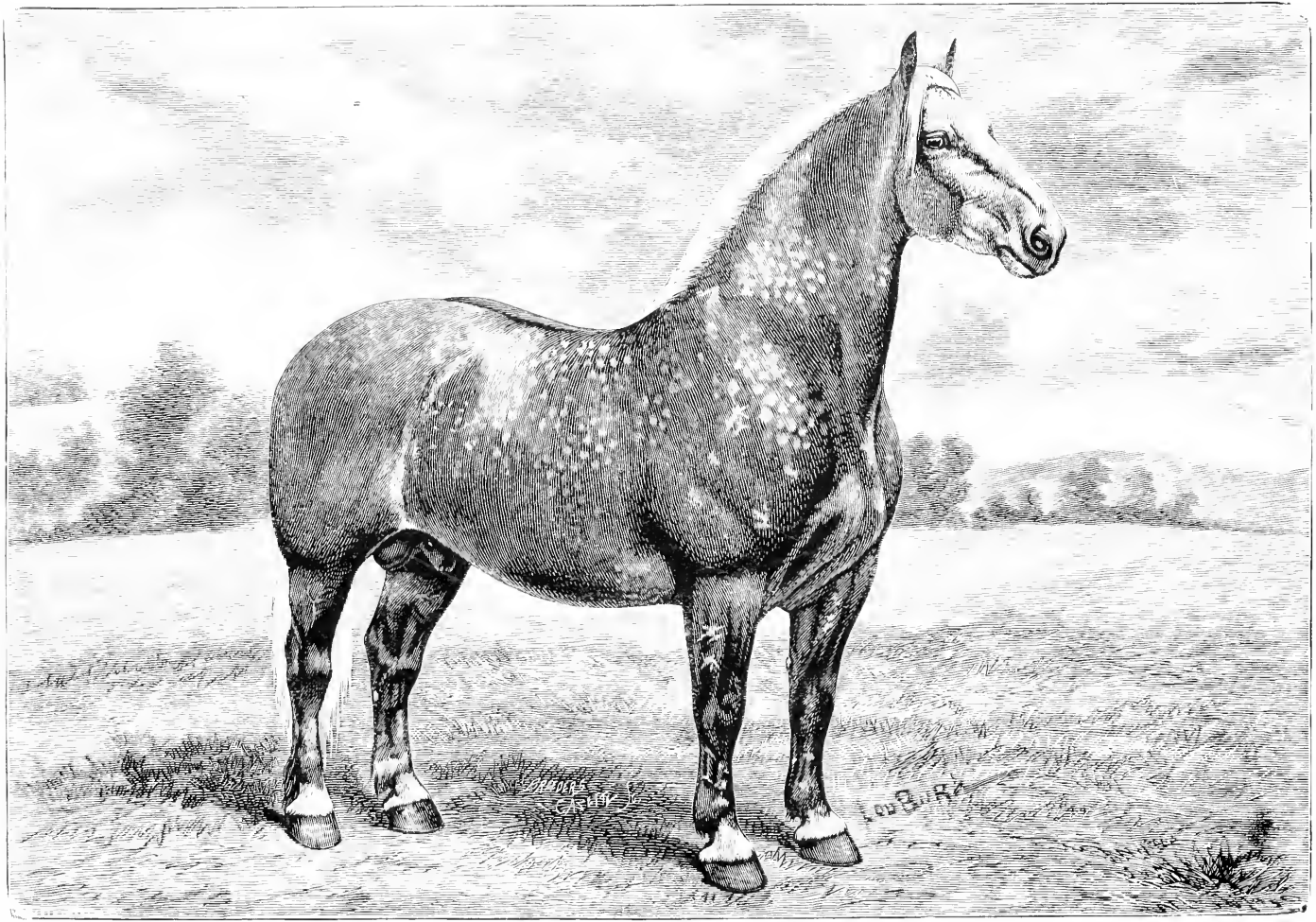
"The French Coach Horse of to-day stands from 16 to 16½ hands high and weighs from 1,350 to 1,500 pounds; high on withers, deep, sloping shoulders; very long neck, well cut up in throttle; fine ears, well set; broad forehead with large, intelligent eyes, indicating good disposition and spirit; short back; well sprung rib; strong, full loin; long, level quarter; tail well set, a

striking characteristic of the breed being to carry the head and the tail high; broad in the stifle; very strong, broad hock, standing on clean, flat, cordy legs; very broad, strong joints in knee as well as hock; sufficient length of pasterns to give them elasticity; and, underneath all, feet formed to stand the road.

"The most striking characteristics and strong point of the breed is their wonderful elasticity and uniformly high knee and hock action, which peculiarly adapts them for use as gentlemen's driving horses, over all other breeds of coach horses.

"A still further commendation for them to our people is the certainty with which they transmit their own good qualities to their offspring. For more than half a century they have been bred under the strictest government supervision, so that their pedigrees are beyond dispute. The government certificate of breeding accompanies each animal, and they all trace directly to the thoroughbred."

In color they are mostly bays and browns, with but little white markings.



LA FERTE.

Percheron Stallion; winner of sweepstakes over all breeds, Chicago, 1888; imp. and owned by M. W. Dunham, Oak Lawn, Ill.

CHAPTER XIV.

DRAFT HORSES.

The Percheron Horse — Breed divided into three classes — Percheron, son of the Arabian — As a draft horse — Road qualities — English draft or shire horse — Origin and history — Disposition — Importers — The Clydesdale horse — Introduced into Scotland in thirteenth century — Clydesdale Society of America — Importers.

THE PERCHERON HORSE.

THE Percheron horse in his own country, Perche, France, is divided into three classes; first, the light Percheron, in which the sanguine temperament predominates; second, the draft Percheron, in which the lymphatic temperament is the most fully developed; and, third, the Percheron intermediately between these two, partaking of the one by its lightness and the other by its muscular force.

Breeders of Percherons in Perche preserve pure and without intermixture the three types; but the Percheron horse as bred for export — chiefly to the United States of America — is the second type, the draft breed, and is a horse from sixteen to sixteen and one-half hands high, and weighing, when in full flesh, some 1,600 to 1,800 pounds, and sometimes more; Arabian built, clean limbs, and the very best of feet, and usually gray in color.

A French writer on the horse of Perche says: "We cannot find in history the written positive proof that the Percheron is an Arab, but we believe it easy."

It is well known that after the defeat of the Saracen Chief Abderame by Charles Martel, on the plains of Vonille, the magnificent cavalry of the foe fell into the hands of the victors, since more than 300,000 infidels were killed on that day, and the horses which they rode were, like themselves, from the East.

Upon a division of the spoil a large number of these were assigned to the men of La Perche, who composed a portion of the French forces, and they must necessarily have left in their progeny indelible traces of their blood. The Lord of Montdonblea, the Count Roger of Bellsmer, and others also imported the Arabian horse into France. These Arabian stallions were crossed upon the large black mares of Flanders, the prevailing draft horse of France in those days, but as the gray has for many generations been the prevailing color, and for other noticeable variations, it is evident that this breed has but little in common with the old parent stock except in size.

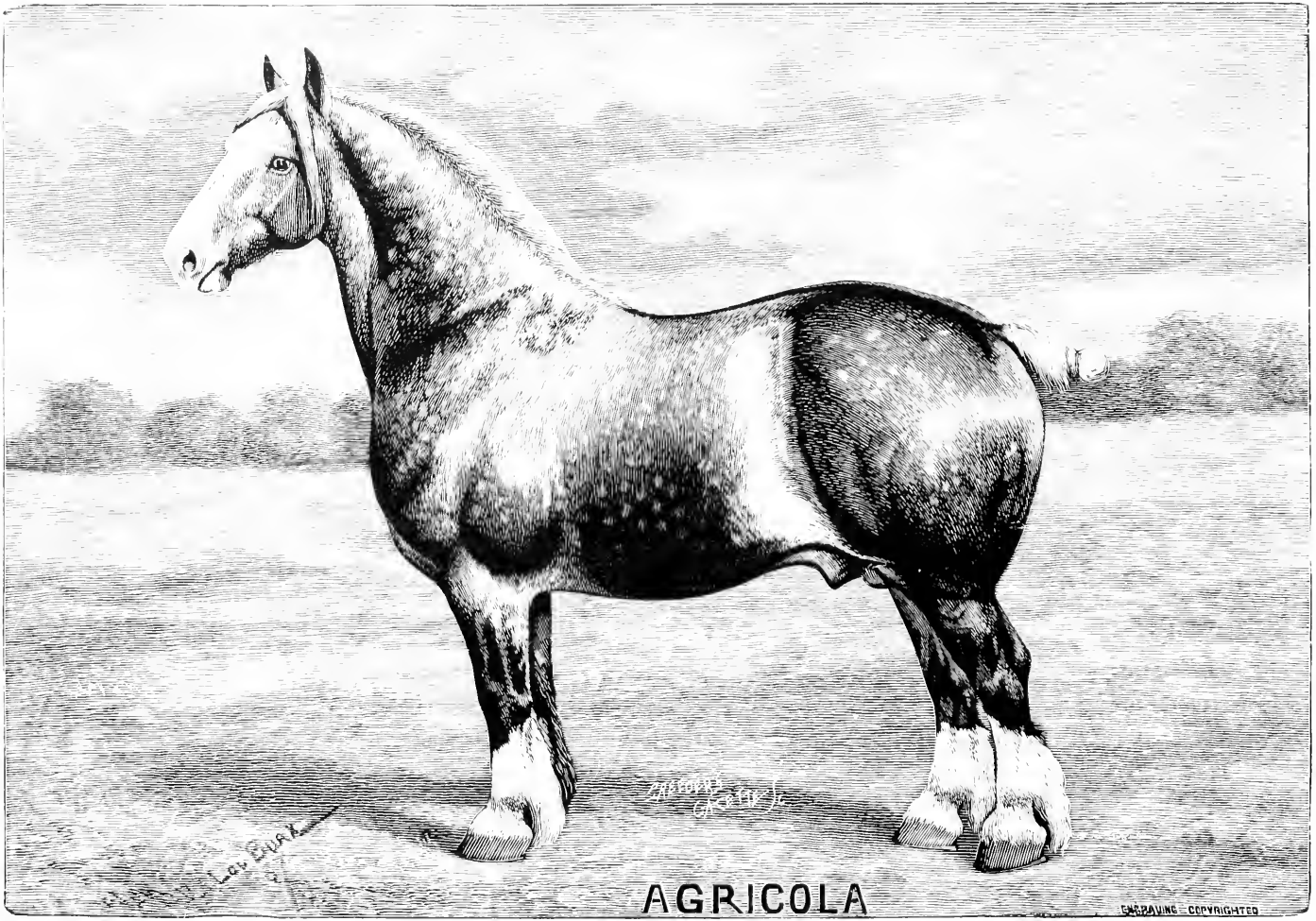
A horse of the type and style, and with the disposition, foot, and leg of the Arabian, and the size of the heavier draft horses, cannot but be the best in the category of draft horses.

The Percheron is especially distinguished for its capacity for rapid locomotion with heavy load, and is peculiarly adapted for drawing the heavy post and traveling carriages of that country before the advent of the railways.

The most active and powerful of the heavy breeds of Oriental origin, what the Darley Arabian was to the English thoroughbred and the gray Arabian Seretan to the Orlofs, the gray Arabian Gallipoli, imported in 1820, has been to the Percheron horse of France. In fact, this Oriental Arabian blood, wherever introduced, in all nations and all climates, has been a powerful factor of improvement in the equine race.

There is every reason to believe that this breed, like the draft breeds of England and Scotland, derived its size, originally, from the large black horses of Flanders; but the Percheron horse, as now bred, shows a very great analogy by his coat, conformation, character of race, mild disposition, and endurance to the Arab, of which he seems to be the son, notwithstanding certain differences, the result of time, climate, and the region in which he is bred and in which he lives.

The Percheron of the primitive type has a gray coat like the Arab, and, like him, an abundant and silky mane, a fine skin, and a large, prominent, and expressive eye.



ENGLISH SHIRE OR DRAFT HORSE AGRICOLA (Imp.).

First prize winner, Chicago, 1888.

They, as a breed, have become the wonder of the world for their rapid draft — their ability to move a heavy load at a rapid gait.

Road Qualities of the Percheron Horse.

A gray mare of Oine, France, in 1845, performed the following match: Harnessed to a tillbury, she started from Bernay at the same time as the mail courier from Rouen to Bordeaux, and arrived before it at Alencon, having made fifty-five and three-fifths miles over a hilly and difficult road in four hours and twenty-four minutes.

In 1864, a gray mare seven years old, harnessed to a tillbury, traveled fifty-eight miles and back on two consecutive days, going at a trot and without being touched with a whip. This was also over a hilly road from Lyons-la-Foret to Pont Audemer and back, a difficult and hilly road.

The following time was made: First day, the distance, fifty-eight miles, was trotted in four hours, one minute, and thirty-five seconds; the second day, in four hours, one minute, and thirty seconds. The thirteen and three-quarters last miles was made in one hour, although at about the forty-first mile the mare was obliged to pass her stable to finish the distance.

When we take into consideration all the desirable qualities in a heavy horse for draft purposes, and especially for moving heavy loads at a rapid rate, and for agricultural purposes, where weight and strength are indispensable, and to continuous work in cities on pavements, so trying to the feet of all horses, and especially so to those breeds disposed to be flat-footed, — then in the Percheron we find so many desirable qualities as to render him incomparable with all other breeds. *Vive la Percheron!*

ENGLISH DRAFT OR SHIRE HORSE.

This most excellent breed of heavy draft horses are, unquestionably, direct descendants of the famous breed of large black horses that Prof. Low — an English writer on horses — thinks inhabited, in a wild state, the vast regions of marsh and forest

which stretched all through Europe from the mouth of the Rhine westward to the Euxine Sea. How or when this breed originated we have no history; but it appears to have been the prevailing one through Normandy, Flanders, and Germany. They were largely imported into England as early as the 11th century and the large stallions were freely used to increase the size of the then diminutive horses of that island.

History says that royalty encouraged their importation and use, and that King John himself imported at one time one hundred choice stallions from Flanders; and Robert Bakewell, the great pioneer of the world in the improvement of domestic live stock, and who became the world's great teacher in the principles of stock-breeding, went himself to Holland in about 1770, where he selected several mares with which to mate the best stallions of England at that time; and with them formed the nucleus of this breed of draft horses which are now so famous throughout the civilized world.

As previously stated, the prevailing color of these large horses was black, but the English draft horse of to-day as now imported and bred in America, is variable in color: many of them are still black while others wear coats of different colors; some are brown and many are bay. We may, I think, safely say that they run mostly in these three colors — black, brown, and bay, with some white markings on the majority of them.

As a breed they are very stout and compactly built, "low down," short coupled, and horses measuring from fifteen and three-quarters to sixteen and one-half hands will usually weigh, in good flesh, from 1,500 to 2,000 pounds.

Their legs are somewhat hairy, — considerably so; rather flat than round, and they usually have pretty good feet, although in some cases rather disposed to be a little too flat.

Their dispositions are usually good and they make excellent draft horses, especially so for slow and heavy work; while their crosses on the smaller stock of our country make excellent teams for lighter hauling, and for agricultural purposes as well.

There have been within the past few years many choice specimens of this noble animal imported to America. Among the importers of note may be recorded George E. Brown & Co. of Aurora, Ill., Blair Brothers, Aurora, Ill., Gailbreth Brothers, Janesville, Wis., etc. Besides those imported into the United States there have been many brought into Canada.

The greatest objection to the original Shire or great cart horse of England, except as a shaft horse to the heavy trucks of London and Liverpool, was its abominable slowness, rendering this breed unpopular with plowmen and teamsters except those of the heaviest work; but by judicious crossings on breeds of more activity, the English draft horse, as we know him here in America, is a different animal as regards activity, from the original cart-horse of fifty years ago.

THE CLYDESDALE HORSE.

The Clydesdale breed now so extensively diffused throughout the United States and Canada, derives its origin from the same source as the English draft or Shire horse; they, too, originated from the great black horse breed of Flanders, Lanarkshire being the original home of the Clydes.

They were introduced into Scotland somewhere in the 13th century, and many of the best of this breed in Scotland were the descendants of a noted black mare formerly the property of William, the Earl of Douglas, one of the ancestors of the Duke of Hamilton, who, in later years, became a noted breeder of Clydesdales of Scotland.

There can be no question but there has been an almost constant mingling of the blood of the Shire and the cart horse of England with that of the Clydesdales of Scotland, and at the present day the difference between the two breeds is so very slight that many intelligent breeders of both England and Scotland recommend that they should be classed as a single breed and that but one stud-book should be maintained for them. Of late years, however, it is supposed that each breed

has been bred separately and now both England and America have stud-books wherein their breeding is duly recorded.

The Clydesdale Society of America was organized in 1877, and the first volume of the American stud-book issued in 1882.

As regards size the Clydes may be classed with our heaviest draft horses. They, like their competitors in strength, the Shire and Percheron, frequently weigh a ton. As to build, they are possessed of powerful limbs, heavy, hairy legs—long hair extending from the knees down on the fore-legs and from near the hocks down on the hind legs—and large, flat feet; too flat, in many instances. They are naturally slow motioned but powerful draft horses, and where the work for horses is both slow and heavy, they are a valuable breed.

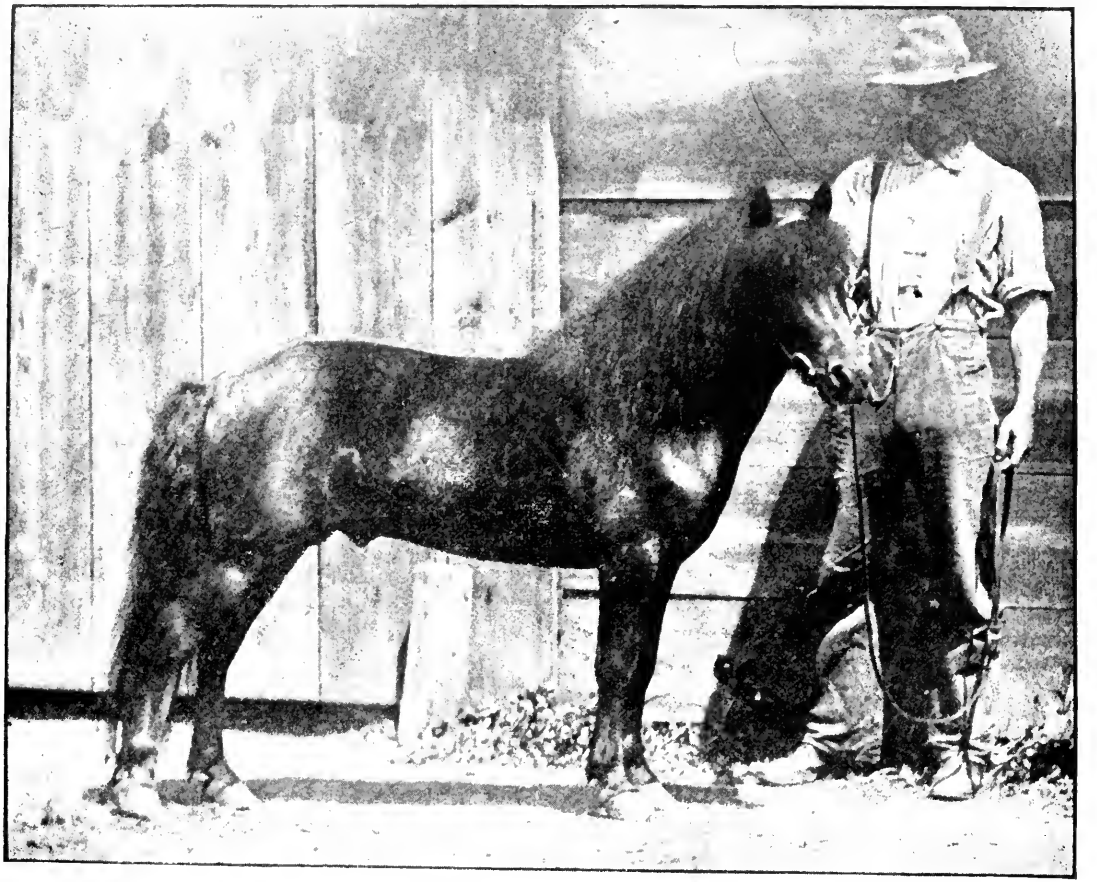
As to color, the modern Clydes are of various colors, but as with their cousins, the Shires, their prevailing colors are black, brown, and bay, with usually more or less white markings.

This breed has been quite extensively imported into the United States and Canada, and have exercised a powerful influence on the draft horse stock of this country.

Among the importers in the United States may be mentioned Powell Brothers, Shadeland, Pa., John H. Bass, Fort Wayne, Ind., Robert Holloway, Alexis, Ill., etc.

Among the Canadian importers may be classed D. & O. Sorby of Guelph, Ont.; H. H. Hurd, Hamilton, Ont.; C. M. Acer, Montreal, Que.; R. Beath & Co., Bowmanville, Ont., and William Rennie of Toronto, Ont.

This breed has its staunch friends among the draft horse breeders of America, and for years it has been a "tug of war" among American breeders as to which of the three great draft horse breeds—the Percheron, English Draft, and Clydesdale—was the most popular and meritorious.



ROBERT McGREGOR, No. 464.

Shetland Stallion, imported by and the property of ELI ELLIOTT, West Liberty, Iowa; height 41½ inches color, beautiful mahogany brown.

CHAPTER XV.

SHETLAND PONIES.

The Shetland Isles — Sustained by survival of the fittest — Purest of all breeds of ponies.

THE Shetland Islands, lying in the high latitude of 59 to 61 degrees, north of Scotland, once belonged to Denmark, but since the year 1468 have belonged to and are a part of Scotland, being separated therefrom by nearly 200 miles of rough and dangerous sea.

They consist of about 120 islands, the whole area of which is about 500 square miles. Of all these islands only about fifteen or twenty are inhabited, chief among which is the Mainland, containing the only towns or villages in the whole group. Lerwick, with a population of about 5,000, is the capital, and Scalloway, the former capital, has a population of about 700, and is situated about seven miles west of Lerwich on the coast; all other places are very small and devoted almost entirely to the fishing interests.

The other islands of this group of some account are Bressay, Whalsey, Fetlar, Yell, and Unst, the latter being the most northern of the entire group, and on which is situated Haroldswick, the most northern port and post-office of Her Majesty's domains.

To the west of the Mainland are Foula, Muckle Roe, Papa Stow, and East and West Burra.

These islands are bleak, barren, and tempestuous, and in winter are extremely cold and uncomfortable, owing their severity of climate more to the cold, damp, sweeping winds than to the actual degree of coldness as indicated by the thermometer, which seldom registers below zero. A zero-day on the Shetland Isles, with a stiff breeze full of sea dampness,

means more suffering from cold and exposure than we can realize — it is said — from the interior of our country with the thermometer at 50 degrees below zero, as sometimes witnessed in northern Montana and Manitoba.

While the temperature of these islands may be all that can be desired for summer residence, and the coast scenery and sea views therefrom most singularly picturesque, yet we would never think of selecting these hilly, rocky, rough, and almost barren islands, located as they are, for a horse-breeding section of our great world; and yet horse-breeding on many of these islands, with the cold North Sea on the one side and the stern Atlantic on the other, is quite extensively (compared with all the other business of these isles except fishing) carried on, and the exportation of horses produced here is of considerable consideration.

While the origin of the Shetland Ponies may be unknown, they having been there as far back as we have any knowledge of the country, yet it is said that sometime in the 16th century some ships of the Spanish Armada went ashore there, having had on board some fine horses belonging to the admiral's stud. This cross, it is claimed, imparted much of the beauty and fleetness to the Shetlands; and to-day it is not much of a trick for the practiced horse-man, well versed in breeds of horses, to detect in the little Shetland of forty inches in height the colors and general characteristics of the Spanish horse, whose blood is so profusely diffused through our native wild horses of America, whose origin was derived from the same source.

Mr. Elliott of West Liberty, Iowa, an extensive importer of the Shetland Pony to America, tells us that a titled lady of Scotland, by the name of Nicholson, "has for years crossed small Arabian stallions on Shetland mares, the produce being a pony 46 to 48 inches high, and some of which are extremely fine. These are known to the trade as Fetlar, or Nicholson ponies."

These ponies are mostly confined to the Isle of Fetlar. Iceland ponies have also been put on the island of Bressay, on

which Shetland stallions have been crossed. Larger ponies from Scotland, the Galloways, and the Exmour have also been crossed on the little Shetland mares in order to give them more size, but so long as pony raising on the Shetland Isle is conducted as it has been for the past years, when the dear little creatures have been allowed to run at large on the hills and live on the heather with what scant grass they could find, and in the winter driven to the extremity of subsisting on sea-weed, and sometimes driven by hunger to the necessity of eating dead fish that have been washed up in the sea-weed, there is no danger, I think, of their ever emerging into draft horses.

The Shetland Pony, as with the Wild Horse of America, is to-day sustained in his own country and on his own soil by the "survival of the fittest." It is said by those who know that "they are seldom fed a handful of grain or hay during the long, cold winters." Neither are they provided with shelter either natural or artificial, but are obliged to stand out of doors and take the weather just as it comes, both summer and winter.

Nature has not on these islands provided trees to give them shade in summer or protection from the cold, sweeping winds of winter. They often, it is said, get so weak and poor that they are obliged to stand braced with their hind feet well apart in order to keep on their feet at all; and hence, in the opinion of Mr. Elliott, many of them "become cow-hocked."

Mr. Elliott, who has often visited the islands, and who is, perhaps, one of our largest importers of Shetlands to this country, says: "The mares seldom breed oftener than every alternate year, but keep at it to a great age, even to thirty years or more." If the foal were not allowed to suck its dam the first winter it is doubtful if many of them would survive.

In size, the pure Shetland Pony of to-day measures from 36 to 44 inches in height. When an imported pony measures more than that his breeding may be considered somewhat doubtful as to purity of blood, for, as has been said before, the quality of blood has been somewhat tampered with by the introduction of foreign blood carried to the islands.

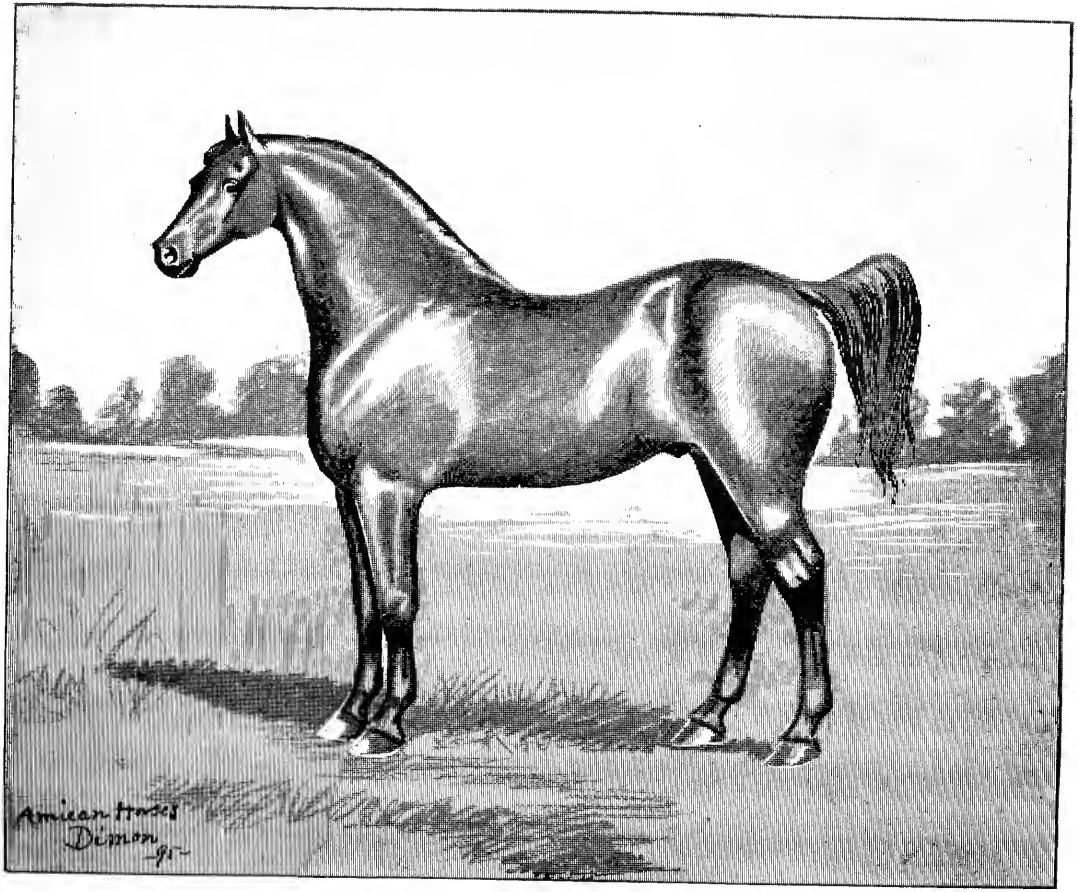
PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.

The pure Shetland Pony I consider the purest in blood of all ponies, and the only breed of ponies of which I shall treat as a distinct breed in this work on "American Horses and Horse Breeding."

In color they are variable, embracing all colors, I believe, from black to white, while many of them are speckled and bear the marks, in some instances, of what I believe to be their ancestors, in part, at least, the Spanish horse.

Their manes and tails are heavy and bushy, which is a characteristic of horses raised in cold countries. The breeding of these ponies as pets and playthings for children among the wealthy and well-to-do classes of our country has already become one of the American industries of importance, and is largely on the increase.

The Shetland Pony of to-day, as we find him in America, either imported or home bred, is a tough, rugged, usually sound (with the best of feet), gentle, clever, good-dispositioned animal, suitable for pets and very tractable, but too small for general use. He is an animal loved by women and children, and as salable to-day, perhaps, as any other breed of horses in America. The American Shetland Club Book, Vol. I, was issued in 1893; the Club contains 85 members and the Book 932 recorded animals.



GREEN MOUNTAIN MORGAN.

CHAPTER XVI.

HORSE BREEDING — PRINCIPLES OF BREEDING.

Breeding a scientific study — Nature's great law — Breed for a purpose — Selection of the breed — Choice of the sire — Breed best mares only — Intelligence, beauty, and disposition essentials.

THE breeding of horses is a scientific study as practical in its demands as is the science of chemistry or *materia medica*, or surgery; aye, and more; so we must learn all the *minutiæ* of the business.

The science of horse breeding has developed special horses for special work, and no one breed or class will fill the market demand for draft horses, coachers, gentlemen's drivers, saddlers, and racers or sporting horses.

History gives all classes and breeds of horses one common origin (see "The Horse," Chapter I), and the horse, as well as all our domestic animals, has been, to a great degree, molded and fashioned by the hand of man.

It is written that God made man a little lower than the angels, and, by general assent, the horse is voted next highest in the scale of created beings. The passage in the Decalogue which declares that the iniquities of the parents are visited upon the children unto the third and fourth generations, is attended with a new and startling significance since it has become generally understood that this declaration is a concise statement of the operations of a physical law applicable alike to man and beast.

The general principles that "like produces like" is true throughout all animal and vegetable life. Everything brings forth after its kind.

We sow pure seed and expect the produce to be of the same kind. Rye will not produce wheat, nor oats barley; "we

cannot expect to gather grapes from thorns, nor figs from thistles."

This rule is just as true in animal life as applied to horse-breeding, inasmuch as no man would think of breeding to a Shetland pony with the expectation of producing a draft horse, nor to the Clydesdale with the expectation of producing a winner on the race course.

Nature's great law is to transmit the general character of the parents to the offspring, and in proportion as the breed is firmly established and uniform in its characteristics, so will the produce be uniform in its character. This great rule of nature is applicable not only to horses, but it is an universal rule applicable alike to all animals.

One of the first steps in horse breeding is for the breeder to fully decide in his own mind what sort of a horse he wishes to produce.

BREED FOR A PURPOSE.

Horses of different breeds for different purposes are in demand, and the breeder should know from the start what he desires to breed for and how to treat them.

Raising horses, like raising grain or any other farm crop, should be varied. If every farmer raised wheat to the exclusion of all other grains, we should very soon find the market overstocked and the business a failure; so of other crops and stock, and of the different kinds of horses. If all breeders should turn their attention to the breeding of race-horses for a few years, the price of a draft horse would soon be double that of a racer; and so of other breeds.

As to the most desirable breed of horses, of all the breeds presented in this book, for the beginner to engage in breeding, I have nothing further to say than this:

Select your own breed from the many here given, first consulting your own taste and ability; but I will say right here that to breed the blood horse, whether runner or trotter, requires a much greater intelligence and skill than to breed the draft or general purpose horse; and unless a man has the peculiar skill

and adaptation for the business of raising race-horses, I would most earnestly advise him to stick to the more common breeds. But when a breeder has the taste and ability for blood-horse breeding, this style of breeding will afford him the most enjoyment, for the breeding of fine and blooded horses as a business has a tendency to elevate one much higher than the breeding of any other class of horses, or sheep, or cattle, or swine, etc.

In breeding horses, as well as all other kinds of animals, do not expect to get better animals than you breed from, for if you do you will very likely be disappointed.

It has been said that eternal vigilance is the price of liberty; it may be said that eternal vigilance is the price of success in the horse-breeding business.

Horse breeding of all kinds at this day and age of the world does not mean any half-way business; it is presumed that every one who engages in the breeding business at all is in it for a profit, and he should not expect a profit on producing something that other people do not want.

In horse raising, as in any other kinds of business, there are certain rules that must be observed to make it profitable, the first of which is to produce an article that is in demand and that will command a fair price.

Whatever the breed decided upon by beginners, I would earnestly advise breeding horses for beauty, brains, and business. Beauty always attracts customers who pay the highest prices; brains, or good horse sense, is an important point for the breeder's own use, and the business horse has a sphere of usefulness unknown by the horse of speed alone, minus the other qualities.

Breed on the principle that a colt will not be better than its parents, although if you mate rightly there are many chances that he may be. Do not depend upon luck, but go at the business in a rational and well-defined way, and then good fortune should crown your efforts.

Never under any circumstances breed any mare to a miserable, ill-built, mongrel brute, the results of which would be fit only

for a "swap horse." The one great lesson for all breeders to learn is to begin at the top, and then breed up. Life is too short to begin at the bottom and breed up.

If you begin at the top, every generation that is added to your stock is a step in advance; but if you commence at the other end you have to reach the standard of excellence as it now exists, and by the time you have reached what is now recorded as the standard, this same standard has, in the meantime, advanced also, and you are as far away from the goal for which you are striving as when you began.

To become a successful breeder a man must be able to know a horse. This does not simply mean that he must be able to tell a horse from a cow, or a draft horse from a thoroughbred, but that he must be able to tell at once the degree of perfection at all points that the animal has attained. He must know how to select and couple his breeding stock of whatever breed or class he decides upon; how to handle his brood mares — how to feed them and how to manage them — especially during foaling time.

Whatever breed of horses you may decide to breed let me entreat you to breed handsome horses of their class; let them be trotters, roadsters, or draft. You will always find a handsome colt or horse the first one to be sold, all other things being equal, and for the best price; and surely, it costs no more to raise a handsome, stylish, and attractive horse than it does to raise an ugly or gawky one that nobody wants at any price for any purpose.

Avoid breeding to any hereditary unsoundness, liable to be transmitted. An unsound horse is a perpetual source of annoyance to any owner and never a source of profit to the breeder. There is no greater trouble in breeding what you want in horses than in any other stock, providing you get the type established, and then, by judicious in-breeding, retain it.

And right here I wish to remark that there is no part of the business that requires more careful studying than this in-breeding. Ignorantly or carelessly conducted, it is the cause of

certain failure; on the other hand, when judiciously practiced, the results will usually be satisfactory.

When a blood is kept pure to its own type, in its own family, possessed of the same blood instinct in both male and female, then like begets like, and not until then. As an illustration of this great truth I refer my readers to the buffalo, the elk, and the deer of our country in their primitive states. I might also mention the wild turkey, the wild goose, and birds and wild fowls of different classes, which have undoubtedly bred in and in from time immemorial, and whose offspring presents an uniform type and a degree of hardiness rarely attainable by any of our domestic animals or birds.

Breed only your best mares, for it is now conceded by the most talented students of breeding that the dam transmits sixty per cent. of her characteristics to her foal.

Intelligence and beauty are important market values for a horse for our own use or to sell. If you have a crazy, ill-looking mare I would not advise using her for breeding purposes; doing so would but propagate her uselessness and ugliness. Disposition should bear great weight in the selection of foundation stock in forming a stud of whatever breed.

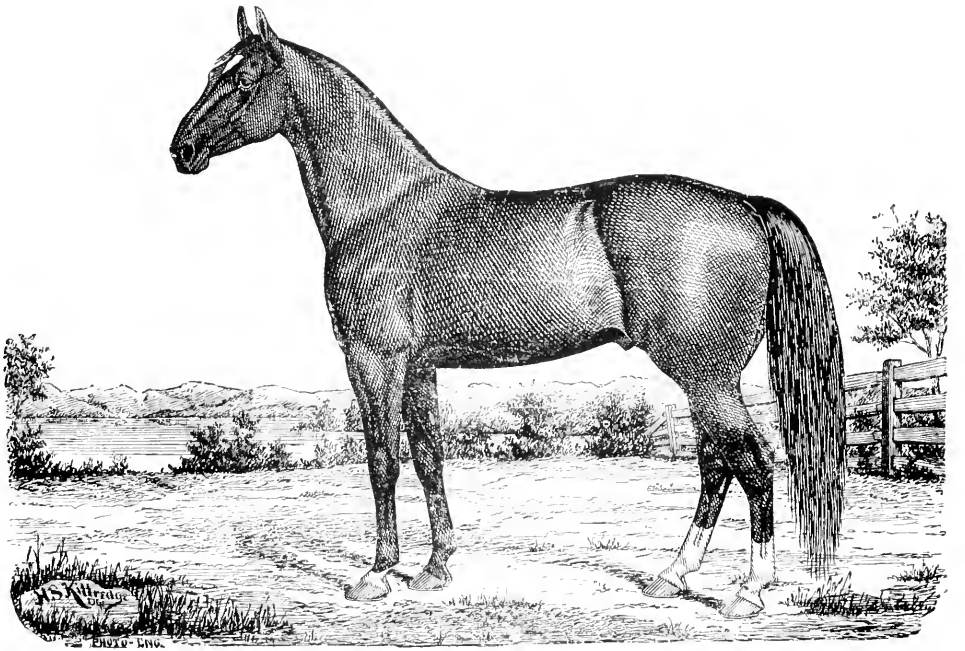
Upwards of twenty years ago when a resident of the State of Connecticut and President of the Woodstock Farmers' Club, and knowing a man in the adjoining State of Massachusetts who had achieved success far above his neighbors in stock raising and farming, I invited him to cross the dividing line (of States) and tell the members of our club something of his management. He, being flattered by the invitation, readily assented and gave us much information in a few words.

"Gentlemen," said Deacon Dwight, "if I have been successful above my neighbors I must attribute such success to strict attention to business and constant hard work, for I work hard all summer getting ready for winter and all winter getting ready for summer."

I introduce this incident in my life's history, not as being particularly connected with the science of horse-breeding, but

yet as being closely connected with its ultimate success, inasmuch as no business as a rule — horse-breeding included — can be made a crowning success without strict attention to business and constant hard work.

One great reason why many breeders are unsuccessful in the horse business is the fact of their not conforming to the demands of the market; if they happen to get started wrong — which is a very easy matter — instead of closing out and starting again, they keep on trying to convince themselves, and everybody else, that they are right. This kind of business rarely, if ever, leads to success. If one starts wrong the cheapest way to get out is to sell out and begin anew.



THE AMERICAN TROTTER, SATELLITE.
Owned by Powell Bros., Shadeland, Pa.

CHAPTER XVII.

SELECTING BREEDING STOCK.

Importance of starting right — Selecting the stallion — Influence of dam of the stallion on his progeny — Best age of service stallion — Selecting the brood mare — Influence of the dam — Unsound mares as breeders.

THE selection of breeding stock as the foundation on which to build up a stud of horses, whatever the breed may be, is not only the first step to be taken in this great enterprise, but should be regarded as one of the most important of all; for unless we start right we cannot expect to meet with full success in this business, and may be compelled, later on, to close out our whole breeding harem and begin anew. We cannot afford to do this, as life is too short to be wasted in follies of this kind, to say nothing of the disappointments and expense attending the same.

As previously stated, I would first advise the beginner in the horse-breeding enterprise to weigh well the matter of selecting the breed most desirable for him to engage in breeding. After this is done let him next determine to be an improver of the breed selected, going into the business with the full determination of leaving that particular breed in a somewhat improved condition from that in which he found it. Such breeders are an ornament to their profession, and like him who "makes two blades of grass grow where only one grew before," a benefactor to his country.

Never use a poor stallion of whatever breed; if you desire good colts see that both the dam and sire are as good as you wish the colt to be.

SELECTING THE STALLION.

It should ever be borne in mind that the stallion approximates to the one-half of the breeding stud composed of one

mare or fifty, as every foal carries one-half of the blood of his sire. Consequently, in order to make horse-breeding, of whatever variety, a success, much depends on the selection of the stallion. It should be remembered that the stallion carries one-half of the blood of his dam; some say more; some breeders assert that the foal carries 60 per cent. of the blood and characteristics of his dam, but of this I will treat later on. Admitting that your stallion carries 50 per cent. of the blood of his dam, one of the first things to be looked after is to what his dam was as to breeding and individual merits, and in nowise overlooking her disposition.

Some of our most successful trotting sires are out of dams whose breeding cannot be traced, but in all such cases they are out of mares of great individual merit, and possessed of great speed and endurance.

Noticeably among such sires may be mentioned Alexander's Abdallah, claimed to be the best son of Hambletonian, and the sire of one of the greatest campaigners of the world, Goldsmith Maid, 2.14, etc. Also another noted son of Hambletonian, the great George Wilkes, with sixty-eight trotters and six pacers in the list, out of that very gamy and enduring mare, Dolly Spanker, whose pedigree could never be satisfactorily established.

The greatest campaigning trotting stallion of the world, Ethan Allen, by Black Hawk, and whose dam, although undoubtedly a Morgan, has not been clearly established. Wood's Hambletonian, by Alexander's Abdallah, the sire of twenty trotters, was out of a good mare said to be a Morgan, but of whose breeding no one knows.

Hambletonian Mambrino, 2.21¼, with five in the list, whose dam was Topsy, an untraced mare, is another example. Magna Charta, the sire of five trotters in the list and the dams of twenty trotters and one pacer whose dam was an Indiana mare, pedigree untraced, is another good one. Smuggler, by Blanco, and who once held the stallion trotting record of the world, 2.15¼, and who sired eight trotters and one pacer, was

out of a mare whose pedigree could never be traced. The Moor, sire of Beautiful Bells and five others in the list, and of the great Sultan with twenty-five in the list, was out of the gamy trotting mare, Belle of Wabash, whose pedigree is also untraced.

Warwick Boy, sire of eleven trotters and one pacer, and out of the McWorther mare, dam of Kelsey, 2.23¼, but whose pedigree is still untraced, affords another instance. Western Fearnaught, whose dam was not traced, is another, although he sired five in the list from 2.18 to 2.29¼; also the dams of thirty-two in the list.

Again, we have the great and once popular sire, Edward Everett, the sire of fourteen trotters, nine sires with twenty-nine trotters and four pacers, and the sire of ten dams of twelve trotters; his dam was a "said to be," etc., but undoubtedly a good one.

Clear Grit, the great Canadian sire of trotters, with seven in the list, and who was sired by the Thoroughbred imported Lapidist, and whose dam was a trotting mare with an untraced pedigree, is the last I will mention in this connection.

I give these instances of merit against established pedigree for the purpose of more clearly illustrating my views regarding the great importance of selecting stallions for breeding purposes out of good, individual mares, whether they are standard bred according to any set of rules of any breeding or registry association or not.

But I do not wish to be misunderstood in this matter, for I do not advise the discarding of pedigrees, for, as previously stated, I like good pedigrees as well as any breeder can, and would recommend breeding from both stallions and mares with the best established pedigrees to be obtained, but not obtained to the sacrifice of the animal sought.

By all means let the stallion selected as the nucleus of your stud, of whatever breed you desire to engage in raising, be out of one of the very best mares of that breed both as to pedigree and individual merit. My experience of over forty years as a

breeder clearly demonstrates to me that the get of any sire, whether equine or bovine, has a tendency to generally resemble the characteristics of the dam of that sire more than that of any other ancestor back of its own parents, and in many cases ignoring all others.

Consequently, in breeding dairy cows of different classes, I have always endeavored to obtain a bull to head my herd from the best milking or butter cow to be obtained, and generally with the best results.

And now, after having been thoroughly convinced that your stallion under consideration has a dam of the right stamp, then the next consideration is to follow up the family of this sire; first taking for granted, of course, that the animal under consideration is individually just what suits you and a rare specimen of the breed he represents.

Of whatever breed he represents he should be a perfect specimen with no defalcation as to natural causes. He should have good, bright, clear, and pleasant eyes, well set in a good-shaped, fine-muzzled, and broad forehead, with fine, tapering ears; the best of round, sound feet — not flat — connected to the body by flat, sinewy legs, not too large in proportion to the body of whatever breed. The fore legs should be well set under the body, and not be stuck on the outside like the legs of a bench. He should be short on the back, long on the belly, well coupled, and ribbed up closely, a full, deep chest, a powerful forearm, and well muscled. He should be easy and trappy in his movements, and of a color corresponding to the breed to which he belongs. As to disposition he should be of the very best, level-headed, kind, and pleasant under any and all circumstances; and to general appearance, beauty, form, color, and coat, he should be of a type to attract attention anywhere.

As to the age of a stallion to which to breed a mare, I say any age from two years up to any age he can with any degree of certainty sire a foal.

Rysdyk's Hambletonian sired Alexander's Abdallah when two years old. Hambletonian also sired twenty-four foals

when twenty-five years old. The reproductive powers of the stallion depend more on condition than age. There has been much speculation as to the comparative value of foals got by certain stallions at different periods of life.

Boston was sired by Timoleon when eighteen years old, who, in turn, sired the great Lexington at the age of sixteen years.

Volunteer sired St. Julian when fourteen years old. Imported Diomed sired the great Sir Archy (called the Godolphin Arabian of America) at the advanced age of twenty-seven years. The pair of the greatest combined ages at coupling were George Wilkes 26, Patsy 17=43, and the produce was Brignoli Wilkes, 2.14¾, while the next oldest were Abdallah 25, Kent mare 15=40, and the result was the greatest horse of all, Rysdyk's Hambletonian. The next oldest pair were Aberdeen 22, Kentucky Central 17=39, and the produce was Kentucky Union, 2.11¾, the best two-year-old of her year. On the other hand, we find three couplings in which the combined ages of sire and dam were six years each that produced respectively, Jack, 2.11½, Elfrida, 2.13½, and Merman, 2.14¼. As an example of an old sire and young mare, we find that Hambletonian, twenty-five years, was coupled with Camptown, three years, and produced the great sire Egbert.

SELECTING THE BROOD MARE.

In selecting the brood mare it should ever be borne in mind that the foal carries at least fifty per cent. of the blood of the dam, and yet there is a great difference in mares as breeders, as some breed after the horse while others breed after themselves; and, again, others divide their influence with the sire in nearly equal proportions.

The first of this class, those who breed almost directly after the horse, are, in breeding parlance, termed passive breeders; those breeding after themselves are positive breeders, and those who divide their influence with the sire are termed intermediate breeders.

In selecting an untried mare as a brood mare, it is almost impossible to determine what her influence on her offspring may be. Yet, if she be a mare of strong will-power and naturally nervous, high strung and trappy, the chances are she will make a positive breeder; *i. e.*, breeding largely after herself. On the other hand if she appears mild, extra clever, and of a passive disposition, the chances are that she may become a passive breeder, following largely after the sire. What I term a positive brood mare will breed after herself whatever the sire may be, and if a good one should be highly prized as the dam of matched teams; while what I term a passive brood mare should be bred only to the very best stallions in the country, as their produce will resemble the sire in most repects. Of course we must take into consideration that with animals as with the human family "blood will tell." What is "bred in the bone" will be transmitted.

The influence of the dam in the transmission of hereditary qualities is generally very much underestimated, and by some breeders almost entirely ignored; yet, when we consider how intimately the foal is connected with the dam, not only previous to its birth but long afterwards, that from the very beginning of life it is fed by the mother's blood and affected by her moods, before it has seen the light she has had the time and power to stamp it with her vices or her virtues, impart to it her weakness or her strength—in consideration of these facts some of the most careful of our breeders are of the opinion that the dam is justly entitled to fully sixty per cent. of her influence on the foal.

In selecting the brood mare great attention should be paid to the shape and quality of her feet and legs, always bearing in mind the old but true adage: "No foot, no horse." The race-horse that is always troubled with "a leg" is a nuisance. Avoid curby hocks, spavins, or hock joints predisposed by nature to spavins, either bog or bone. Her leg should be rather flat, firm, hard, and smooth, showing an entire absence of adipose tissue; rather large but well-defined joints entirely

smooth and free from all bunch or blemish; firm but elastic cords; short in the pastern; short from knee and hock to pastern joint.

The legs should stand squarely and firmly under the animal, the toe turning neither in nor out. She should be of full normal size for the breed represented, neither over nor under size; should be possessed of a good head with broad forehead, wide between the eyes and ears; ears should be fine pointed and well set. She should have a full, bright, clear but pleasant eye, with not an over-abundance of white about the lid,— but better white than red;—should have a good, well-set neck, carrying her head in good style; should be short on the back, long on the belly, with a deep, full chest; well and closely ribbed up, a long hip and possessed of a superabundance of muscle of the flanks.

She should be possessed of a good, clean, trappy gait,— whether intended as a producer of speed or draft;—should have a fine, glossy coat and of a fashionable color for the breed to which she belongs.

Disposition is also one of the most important items to be considered in the selection of the brood mare; for while we desire plenty of spirit and high-life, we despise a low, base-spirited and treacherous mare to breed from. Never select a vicious mare from which to breed any class of horses.

There has been much said and written against using unsound mares as brood stock, and while I fully agree with such champions for sound stock for breeding purposes, I cannot conscientiously advise the discarding of good mares on account of *accidental* unsoundness; the proofs to the contrary being too strong when taking into consideration the following facts: The dam of Sherman Morgan, the Narragansett pacing mare formerly ridden by John Brown of Providence, R. I., and afterwards taken to Vermont by James Sherman and bred to Justin Morgan, had a spavin. The fleet, high-spirited gray mare, dam of old Ethan Allen, also had a spavin. The Charles Kent mare, dam of Rysdyk's Hambletonian, was driven in the city

of New York until unfit for use by lameness. Katy Darling, the great road mare of New York city and the dam of Alexander's Abdallah, was dead lame at the time of being bred to Hambletonian, and a cripple for life by getting one of her hind feet caught in the frog of a railroad track. Clara, the dam of Dexter, 2.17¼, had a hip knocked down and was otherwise blemished.

I could enumerate many other instances where good, well-bred and gamy mares, meeting with accidents that crippled them for life, were put to breeding with good results; but I have already given you enough examples, I think, to convince you of the feasibility of utilizing the best mares for breeding purposes, though they may have been so unfortunate as to get crippled.

CHAPTER XVIII.

CARE AND MANAGEMENT OF THE STALLION.

Box Stall — Paddock — Kind treatment — Undue familiarity — Feed — Exercise — Pampering — Grassing — Winter care — Carrots as food — Worms — Controlling.

TWO things are absolutely necessary on the start, viz., a box stall and a paddock.

The box stall should not be less than 12×14 feet for any stallion, and may be 14×14, or 15×15, or 16×16 feet, with one door, four feet wide and eight feet high, made double and strong, thoroughly riveted, and hung on three good hinges. Have one window that will give plenty of light without draught.

Wainscot the entire inside of the stall, except at the door, with one and one-half or two-inch plank; the wainscoting to be four or five feet high from the floor.

The feed box should be broad, so that the food may be spread out thinly over the bottom to prevent the stallion from eating his grain too hastily.

Always close the door on entering or leaving the stall, and always see that the door is properly fastened.

The paddock should not be too large — 50×100 or 40×60 feet may be a good size. The fence should be seven feet high, at least, and may be higher. It should be made of boards reaching to the ground to prevent his feet slipping under it, and should be nailed from within against stringers and posts that are without, for a horse will sometimes climb upon the stringers to look over the fence and remain there long enough to injure his tendons.

Never relax your watchfulness when about a stallion; treat him with the utmost kindness and consideration — teach him to

have the utmost confidence in you. Never play with a stallion and allow him to become too familiar, as familiarity may breed contempt and you may lose part of your influence over him.

One great mistake by inexperienced persons, and by others who should know better, is the endeavor to have the stallion in fine show condition, which, of course, means fat, and are constantly dosing them with mixtures. As a rule of nature, a healthy horse or man needs no medicine.

Let your stallion be well and regularly fed with healthy and nutritious food, with plenty of daily exercise to keep his muscles firm and hardy, and let him be well groomed so that his coat may present a fine appearance. The skin should be kept thoroughly clean by an occasional washing and frequent rubbing and brushing.

The mane and tail should also be kept clean. If very dirty soap may be freely used in the cleaning process; and when this is faithfully attended to there will be but little danger of having a fine tail or mane ruined by rubbing.

His food should be clean and free from dust or mold, and the stall should be kept clean, well lighted, and perfectly ventilated.

Let the stallion have the greatest amount of outdoor life and exercise consistent with good judgment.

A stallion kept in a band-box may be beautiful to look upon, his soft, silky coat may shine like velvet, but it should be borne in mind that his value as a sire does not depend upon looks alone, but power of transmission.

There are far too many pampered stallions, and, as a result, they are inferior stock horses and very uncertain foal getters. Give the horse attention and good care, and, with that, plenty of steady work, that he may be full of energy and prove his worth in the stud.

To the owner of a brood mare it means much whether a stallion is in good condition or not. The promise of free return next year does not make good the loss.

There is no animal that does not enjoy its freedom, so,

when it can be allowed, liberty should be granted to the stallion.

For summer food, feed good, clean oats, clean hay, plenty of green grass, and no drugs, eggs, or condiments, as a rule.

Grassing out with halter, attended by the groom, early in the morning while the dew is on the grass, is of great benefit to any stallion, and especially toward their feet.

Unless he has a good paddock to run in he should be driven every day the weather is good during the mare season. I rather prefer the paddock for high-spirited horses, and the driving for more sluggish ones.

A state of nature, as near as it can be attained, is attended with the best results of the procreative powers. After the season closes the condition of the stallion for the next season's business will greatly depend upon the manner in which he is kept from the close of the present to the commencement of the next.

In most cases in this climate from October 1st to the first of March the stallion is not called upon for stud duties, and usually but little is done between July and April.

He consequently has a long period of rest and recuperation from the drain upon the functions of the sexual organs which service in the stud has required, but it should not be a season of pampered and over-fed indolence, as is often the case.

When convenient to do so the very best treatment is to use him at light work of some kind, and work him regularly but moderately up to February or March. Feed enough grain to keep him strong and healthy, but not fat.

WINTER CARE.

It is always best to give the stallion light work during the fall and winter, but in many cases this is not convenient. The next best thing is to let him have daily exercise in an open paddock every day that the weather will permit, if even but for a short time each day.

Very little grain should be fed during the winter, and that little should consist of bran, oats, and other light food.

Carrots are excellent to be fed during the winter months, with or without grain. Good, clean, oat straw is good fed with carrots and a few oats. He is better off in a warm stable without a blanket, except, perhaps, in the very coldest weather.

The custom of keeping a stallion tied in a stall with a feed box full of grain is not only unprofitable, but inhuman.

Cornstalks, grass, potatoes, carrots, turnips, and apples are all admissible as a change, fed in small quantities for the purpose of pleasing the appetite and loosening the bowels. Keep mineral salt constantly by him; dry wood ashes are also almost indispensable.

Keep clear of worms by all means. Watch the condition of the bowels; attend to the teeth, and give especial attention to the feet.

Average per cent. of mares got in foal by stallions is 67; average per cent. of living foals dropped is 62.

THE NUMBER OF MARES A STALLION MAY SERVE.

It is generally considered as a two-year-old the service should be light, if any.

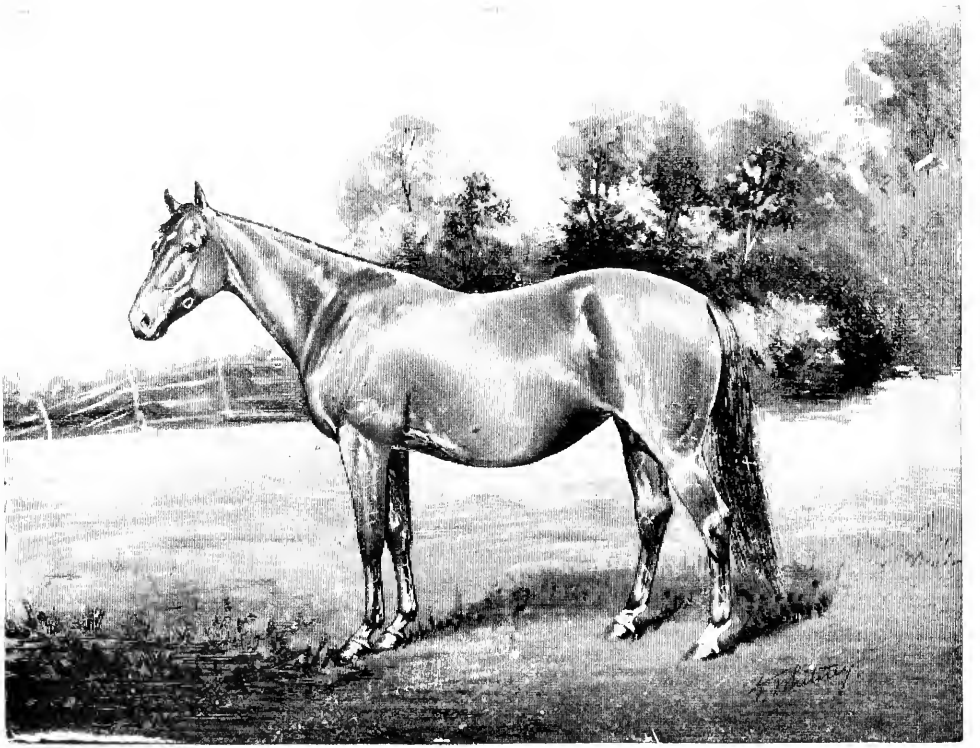
A three-year-old may be limited to fifteen or twenty services, and a four-year-old should not go beyond thirty.

There can be no question that the use of the procreative powers of the unmatured horse tends to retard his physical development.

CONTROLLING THE STALLION WHEN IN USE.

While the temper and disposition of stallions are largely matters of inheritance, yet much depends on the breaking and management. It is much easier to spoil a horse than to cure him of bad habits after they have once been allowed to form.

Headstrong stallions should never be led out except by a bridle that will enable the groom to have perfect control over him.



VICTORIA.

A noted trotting brood mare; foaled 1870; owned by C. F. Sayles, Pawtucket, R. I.

GROOMING.

Use an old, dull currycomb, a root or broom brush, and a bristle brush, followed by flannel cloth; these are all the tools necessary in cleaning and polishing his coat, and they should be used in the order named, and used every day.

While the stallion should *not* be pampered and over-fed, he *should* be kept as clean as possible, as cleanliness in animals is of importance, even as it is in man, and we all are taught in the latter case, "cleanliness is next to godliness."

CHAPTER XIX.

CARE AND MANAGEMENT OF BROOD MARES.

Getting doubtful mares in foal — Eternal vigilance — The productive period — Period of gestation — Marking the foal — Use the brood mares — Stabling pregnant mares — Wheat middlings — Enlargement of abdomen — Attention at foaling time — Jealous mothers.

THE first thing to be done in the management of the brood mare is to get her in foal, otherwise she cannot properly be called a brood mare. More money is probably lost on stock farms through carelessness and the improper handling of mares in the breeding season than in any other part of the horse breeding business.

GETTING DOUBTFUL MARES IN FOAL.

Mares that are not regular breeders should have a run at grass for a few weeks without grain and then taken up and given grain and put to light work until coming in season, and then bred. Mares bred and then turned to grass, or mares running to grass, are not near as likely to get in foal as are those managed in this way.

A point upon which there is a great diversity of opinion is when and how often a mare should be tried after being served by the horse. A mare will almost invariably be "in heat" on the seventh day after foaling if she is healthy and has received no injury from foaling, and in most cases it is desirable to have her served at that time if it is thought best to breed her that season. After service she may be tried again in two weeks. There is no regular time for a mare to come in heat — after the ninth day from foaling — nor any regular time for her to stay in heat.

In this business, as in most others, "eternal vigilance is the price of success." Mares sometimes, after being bred, refuse

the horse for two months or more when tried regularly and then come in season.

My plan is to begin early in the season, say in March, and then try them to the horse regularly every two weeks during the season.

As to the productive period of mares the best age is said to be from five to fifteen years. Breeding fillies at two years of age often seriously interferes with their symmetrical development. Three years is perhaps young enough to breed a mare and from then on in some cases to thirty years, or as long as she continues to produce and raise good foals.

The period of gestation in mares is variable. In my own experience of upwards of thirty years, as a breeder, the average time that mares have carried their foals has been eleven months and nine days, and has ranged from ten months and twenty days to twelve months and twenty-three days. Difference in breed makes no difference in time. It has been reported that mares have carried their foals upwards of thirteen months. A case of this kind was once reported of a mare in Jessamine county, Ky., who carried a foal thirteen months and twenty-eight days.

MARES MARKING THEIR FOALS.

Mares worked with other horses frequently color or mark their foals after their mates; also colts are often marked from fright, sympathy, and curiosity, and breeding for color with a view of forming a fixed type or in breeding matched horses, the breeder cannot be too careful on this point.

I once had a pair of Vermont Black Hawk mares, both as black as jet. I bred them to a brown Morgan stallion, without any white, in 1862, and at the time I bred one of these mares a sorrel mare with a white stripe in her face was brought to my stallion, and I noticed at the time that my mare took quite a good deal of interest in this outside mare, but thought nothing of it until foaling time for my mares, when, instead of having a matched pair as I had reason to expect, one of my mares

dropped a black colt and the other a sorrel filly with white markings, exactly like this neighbor's mare.

Another case of my own was in 1867, when I bred a bay mare to a bay Morgan stallion without any white markings, and this mare got away from a boy and ran to one of my neighbors, and when I found her there a short time afterwards she was with and seemed interested in a black mare with a white face; and the next year when she foaled her colt was black and marked precisely like my neighbor's mare.

One of the most wonderful instances of this kind ever known was of a colt foaled in the neighborhood of Spokane Falls, Washington, bearing in his left eye a perfect picture of the waterfall of Spokane Falls.

Moderate work is not only harmless but beneficial to mares in foal, provided they are nor over-loaded or over-driven. It is much better than keeping them tied up in a stall or turned loose to run at large in yards or fields with other horses. In the former case they suffer for want of exercise and in the latter case they are exposed to numerous accidents.

There is force in the suggestion that a good farmer can raise a colt cheaper than can the professional breeder, as he can use the mares in his farm work. Undoubtedly there is some danger of injury to mares in foal, or to the foals from working the mares, but with careful management this danger is slight.

I once heard a successful farmer say that a pair of draft mares owned by him annually paid the wages of the man who worked them, and that they lost only about ten days at foaling time.

My practice has ever been to make reasonable use of mares while in foal and while they are suckling their foals and have seen no injury to either from the practice.

For work on the farm or road I decidedly prefer to have the foals kept separately from the mares while the latter are at work. Great care should be taken that the colt should not be allowed to suck while the mare is too hot.

Another advantage possessed by the farmer over the large

breeder is that he can have full use of such mares as fail to get in foal, and there are few breeders so fortunate as to have none of this class.

Pregnant mares should be stabled with due regard to security against annoyance, compression, or injury by other horses, and especially guarded against the accident of getting cast in their stalls.

Don't keep breeding animals fat, but simply in good order; a good healthy condition at all times is necessary for the greatest success in breeding. It is a good plan to feed the brood mares a few quarts daily of wheat middlings — the whole grain coarse ground or cracked would do as well — for three months before foaling. There is something about the gluten in wheat that gives the foal bone and strength, and it is less liable to come weak or crooked. Under the old process of grinding wheat, bran and middlings had plenty of the glutten but now it goes mostly into the flour, and the bran and middlings are of less account.

The mare does not require to be fat or grained highly before foaling or immediately after. It is always best to allow the mare to run to grass if it is large enough for a bite, before foaling, as it will help to make milk and will put the system in a healthy condition to meet the demands of nature. Every breeder should recognize the importance of exercise for the brood mare, either in the paddock, on the road, or in the field; thus keeping them strong and healthy and insuring a much more hardy foal than when they are allowed to stand quietly in the stall without needful exercise.

It often happens that there is considerable enlargement of the lower surface of the abdomen and chest during the latter part of the period of pregnancy. The swelling will sometimes extend from the udder to the fore-legs and become an inch or more in thickness. This need not, however, alarm the young breeder, as an hour's walk every day will generally cause most of the swelling to disappear.

When the time of foaling approaches, the mare should be

turned loose in a large box-stall or, in mild weather, in a paddock or lot. Everything should be removed from the stable that would in any way be likely to hinder the colt from getting on his feet.

A few hours before foaling milk will generally be discovered oozing from the teats or the plugs in the orifice of the teats will be pressed down so as to be plainly seen. When this is observed the foal will make its appearance within twenty-four hours, and someone should be at hand and keep close watch of the mare until it is dropped.

Some mares may raise colts for years, running at will with no one near at foaling time, but this is not good management, for it sometimes happens that the mare needs assistance in the delivery of the foal, and sometimes the foal has not sufficient strength to break the blanket in which it is enveloped, in which case, unless someone is ready to render assistance the young animal will speedily smother to death. Again it happens sometimes that mares, especially with their first foals, will not own their offspring, but will rush upon them violently and either stamp or kick them to death if someone is not near to divert their attention.

After removing the blanket the newly-dropped foal should be rubbed dry gently with soft, woolen cloths, or clean, fresh straw. If strong and healthy the new-comer will soon make an attempt to get on his feet. A little assistance from an attendant will save the foal many a bump and possibly its life. When the colt begins to manifest symptoms of hunger the man in charge, who, by the way, should be one with whom the mare is acquainted, should assist the youngster in taking his first meal. It is often a difficult task and will require great patience on the part of the groom to get the teat into the mouth of the foal, but when that is accomplished and the youngster gets his first swallow of milk the worst of the job is over.

If the dam is of a nervous temperament she will sometimes object to being touched by the foal; if she is inclined to be

cross it will be best to pick up her near fore foot, bending it backwards until it rests against the forearm, and fasten it there by means of a broad, soft strap; a common pole-strap will answer the purpose admirably, but if this kind of a strap is not handy, then a hold-back from a single harness may be made to answer. With her head well elevated and fastened there, and one fore-foot strapped up as above described there is but little danger from injury by kicking.

Close watch should be kept to see that there is an evacuation of the bowels. A great many foals are lost every year owing to a lack of attention to this very important matter. Give an injection of half a pint of warm soap suds and give a physic of castor oil, if necessary; but usually the injection will be sufficient.

It is always well to have on hand at such times, and to give the mare a wheat bran mash mixed with warm water or a few quarts of warm oat-meal gruel. Give no cold water to drink for two days after foaling if in cool or cold weather, but take the chill off by adding a little hot water or by the insertion of a hot iron into a pail of water.

Care should also be used in feeding grain to the dam directly after foaling, but in a few days she may be fed liberally — commencing lightly and increasing gradually — with a mixture of ground oats, cracked wheat, and corn-meal lightened up with bran. A good mixture may consist of five bushels of oats to one of wheat, one of corn-meal, and two of bran. The foals will soon learn to eat with their mothers.

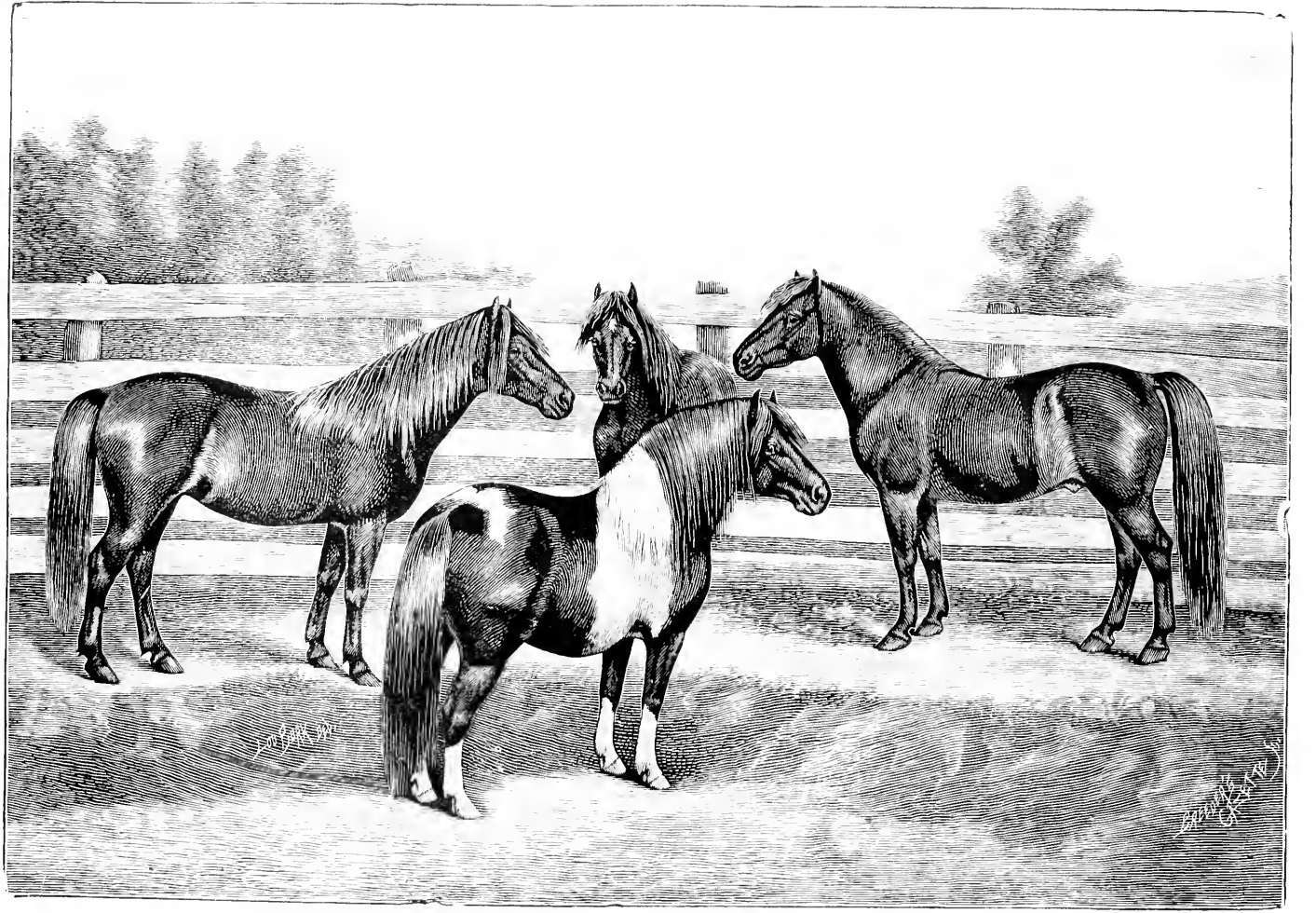
If the weather is suitable the sooner the foal is turned into a warm, dry, any sunny yard the better. The dam should not be allowed to stand in a draught of air or remain out in damp or chilly weather.

It is certainly a trouble to look after the foals as they arrive, but it just as certainly pays to do so; if they are weak they sometimes require a little stimulant of whisky or other spirituous liquor.

JEALOUS MOTHERS.

Some mares, especially those of very sensitive organization, are excessively jealous of their offspring and are opposed to anyone coming near them, and in their zeal to protect are liable to injure them. Others are proud of their foals and take great delight in exhibiting them to their friends.

The great race mare, Goldsmith Maid, was one of these sensitive mothers, and it is related of her that when her first foal was brought forth she would allow no one to come near it; but one day Charley (her old attendant — swipe — when she was in Budd Doble's stable), visited Fashion Farm. Charley and the Maid were once firm friends, and to test the endurance of that friendship Charley concealed himself near the cranky old mare and allowed her to hear his voice. The Maid was in the paddock with her colt by her side. On hearing Charley's voice she instantly raised her head and gave a whinny of delight, and with that bold, free, sweeping stride that in by-gone years had electrified thousands, dashed about the paddock in search of her old friend. When Charley appeared she went to the fence over which he leaned, showing her joy in every action. Not only did she welcome him but invited him to fondle her baby. Round about the two she circled, uttering a low whinny which expressed an unspeakable joy, and she acted the showwoman to a marked degree in the exhibition of her young colt.



GROUP OF SHETLAND PONIES.

Owned by Eli Elliott, West Liberty, Iowa, importer and breeder.

CHAPTER XX.

MANAGEMENT OF THE FOAL.

Care of young foals — Getting to nurse — Evacuation of bowels — Injections — Feeding the foal — Heated milk — Raising by hand — Weaning — Feeding — Care of weanlings — Handling — Halter breaking — Breaking foals — Naming the colt.

NO part of a breeder's time can be more profitably spent than when looking after young foals, and if more diligence were used in looking after the mare and foal immediately preceding, during, and following the foaling period, much less loss would be sustained at this particular time.

At foaling time the mare should always be attended by a competent person able, if necessary, to assist her in her labors, and to cut and securely tie the navel cord. He should then, if necessary, help the mother to dry the foal by rubbing with rub cloth or dry straw, and when the foal makes his first effort to stand on his feet he should be assisted to do so and not be allowed — as is often the case — to struggle to accomplish this object until so much exhausted as to be unable to stand up and suck after he has succeeded in gaining a standing position; besides, in his struggle to get up, he is liable to receive permanent injuries. I have known of the loss of an eye and the knocking down of a hip and other injuries by this means.

When the foal is once firmly on his feet the first thing to do is to get him to suck, as he requires nourishment at once, and there is nothing equal to the first milk of the mother in this, as in the case of all animals, from man down to the lowest order of the mammalia class.

It is frequently the case, and especially so with nervous mares with their first foal, that they are unwilling at first to allow the colt to suck; hence the great importance of having a

competent man at hand to assist the foal in securing his first meal. This man should be one with whom the mare is acquainted, and especially so if she be of a nervous temperament.

It sometimes happens that the foal has not sufficient strength to break the blanket in which he is enveloped; then, unless someone is at hand to do so, the young thing will soon smother to death.

When it is difficult to get the youngster to help itself, try to stream some milk from the teat of the dam into its mouth, and rub some of the milk on its nose. Continue this until it gets a taste of the milk, after which it will be more eager to help itself.

Close watch should be kept to see that there is an evacuation of the bowels. A great many foals are lost each year by a lack of attention to this very important matter. If the foal exhibits symptoms of distress or much uneasiness, and especially if the hind legs are drawn forward and the head drooped and the little thing stumbles about the stall or paddock as if trying to stand on its head, or turn a somersault, give it at once an injection of half a pint of blood-warm water with just enough soap in it to make it feel slippery to the touch. Glycerine may be added to the water in proportion to one part glycerine to two parts water. This may be administered by a common rubber bulb syringe suitable for family use, or by any other style of syringe not too large.

It may be necessary to follow up the injection for a day or two. A dose of castor oil may be given if required; care should be taken not to give more than is necessary lest purging may be induced.

If the weather is suitable the sooner a foal is turned into a dry, sunny yard with its dam the better. There is nothing better than sunshine for all very young animals, especially if it is not too hot. It is some trouble to look after the youngsters when they are very young, but it pays to do so.

FEEDING THE FOAL.

More can be done for the foal in the first six months of its life than in any year thereafter, consequently the mare should be extra well fed during the time of nursing the colt, and then, if she proves to be a poor milker, as is many times the case, the foal should be fed in addition to what it can get from its dam. It should be taught to drink sweet skim-milk, which is very good for young foals. Do not feed whole, or new milk, as cream is unnatural to the foal; there is none in mare's milk. The foals will learn to eat grain with their mothers at an early age.

A brood mare suckling a foal, especially if said foal is expected to become valuable, should be fed liberally for milk, both as regards quantity and quality.

When the colt gets to be three months old he will eat considerable food in addition to what he can get from the mare, and he should be liberally supplied with oats in a separate feed trough where he can help himself and where the mare cannot get to them to drive him away.

SUCKLING COLTS.

When the mare is used on the farm or road in hot weather so as to heat her blood, the foal should not be allowed to suck until she has cooled off. Let him fill himself before the mare is put in the harness. Colts injured by heated milk seldom recover from it for a year or two, and sometimes never.

RAISING BY HAND.

It sometimes becomes necessary to raise a foal wholly by hand, as it is called when required to be raised without the aid of its dam. Such was the case of Andrew Jackson, the founder of the Clay family; of George Wilkes, 2.22, the founder of the Wilkes family; of Lilian Wilkes, 2.17¾ (at three years old); of Belle Hamlin, 2.12¾; and many other good ones have been raised on cow's milk.

This is a plan worthy of more extended experiment, and is

a great help in bringing a foal through his first winter until grass comes; but grain should also be fed in connection with the milk. The milk should be fed slightly warm — about the same temperature as it comes from the cow, and termed "milk warm"; this is nature's temperament for all young animals.

As soon as grass gives out the fall after weaning it is quite important that the foal should have a laxative green food. Almost all cultivated roots are good, but by far the best are carrots. When sweet apples are plentiful and cheap, there is nothing better as long as they will last.

When the foal is weaned he will want a variety in his grain ration, but it should consist chiefly of crushed oats or ground oats; some wheat is always good.

I like a little corn-meal mixed with ground oats and other feed for colts wintered in northern climates. Some think that corn-meal is too heating for young colts; so it is, fed liberally and alone as a grain ration, but mixed as above, and fed in winter in our Northern States, it makes a pretty good overcoat to help keep the youngster warm, and will keep them free from worms better than any other food except linseed oil meal, which, by the way, is a most excellent food for any and all stock, and especially so for all young animals; but it should be fed sparingly and mixed with other grains.

In the care of colts scant feeding is to be deplored, and, worse yet, the exposure to severe cold and storms; while overfeeding the colt makes him clumsy by having the nerves overloaded with fat. Digestion has too often been impaired by an over-loaded stomach; if this is done in the colt there is little hope of having a healthy and long-lived horse.

In caring for weanlings the first winter, give them plenty to eat of clean, good, bright hay, and sweet rowen, if accessible, with grain rations suitable to its size and needs. Do not overfeed with grain, and give an occasional feed of roots, etc., and give plenty to drink. Skim-milk is best, but water will do, and give plenty of open air exercise and sunshine, but carefully avoid exposure to bleak winds and cold storms.

All colts should be well halter-broken the first winter of their lives if not sooner. Keep a good supply of clean wood-ashes and salt near them; they will eat all they require and no more. This keeps them free from worms, and otherwise healthy.

WEANING.

When the colt is taken from the mare it may be tied in an adjoining stall with the partition open enough so that they may see each other. The mare should be fed lightly on dry feed.

When the bag becomes so full as to cause uneasiness it may be partially milked out — not dry — by the colt for the first time, but afterward by hand, as the milk will become somewhat feverish and not good for the foal.

After weaning the colt may be fed skim-milk, especially if not in good condition at weaning time.

Good, sound, clean oats is the best food for colts. A little oil-meal is also good, as well as carrots, clean hay, and clover, if clean and sweet.

HANDLING.

Commence to handle the foal from the first and let him distinctly understand that while you are his superior in strength you are his friend and will not hurt him; then he will have full confidence in you and will ever be easily managed.

Halter-break foals when only a few days, or at the most, a few weeks old. When taken at from two to six weeks old they can generally be halter-broken in half an hour, especially if they have been handled from birth.

BREAKING FOALS.

It is wonderful how easy it is to accustom a weanling to harness, compared with the work if delayed until older.

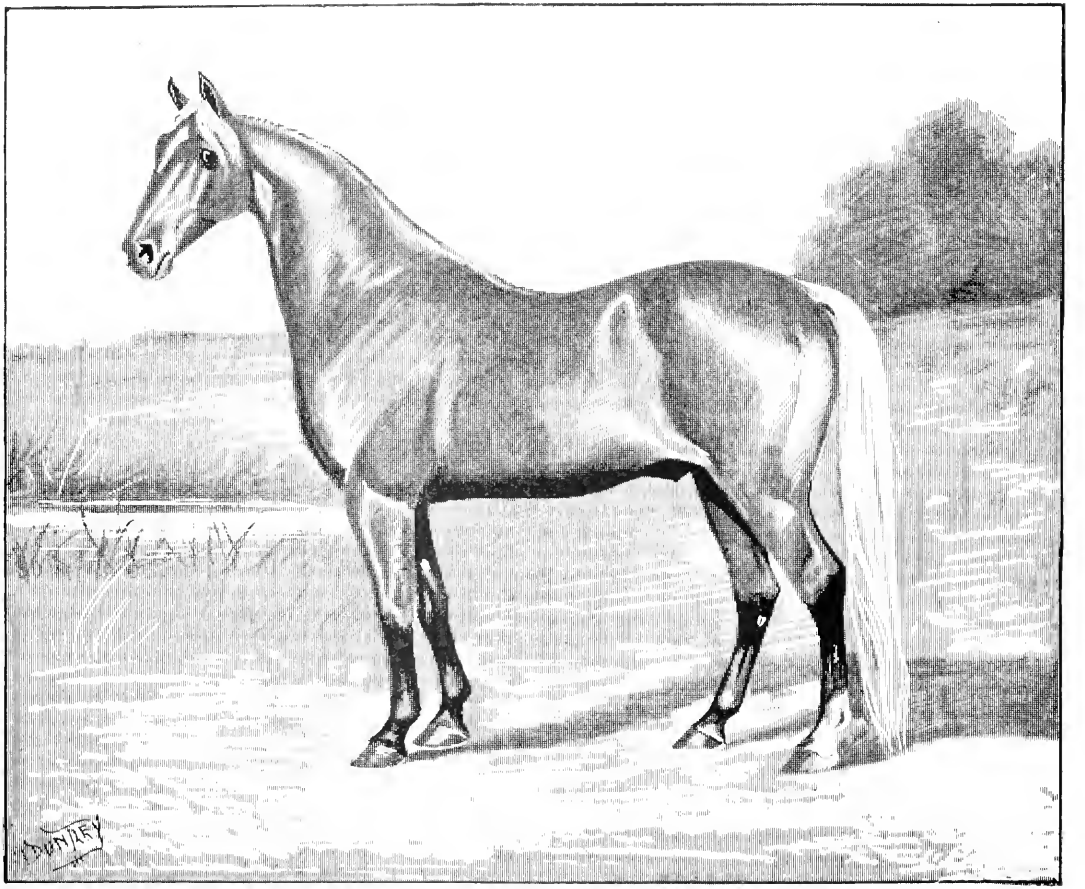
NAMING THE COLT.

Next to naming the baby this is perplexing and difficult. Large breeders are many times at a loss to know what to call their foals. I prefer giving each animal at the start a good

and appropriate name. For this purpose I have for many years kept a book of well-selected names, both male and female, alphabetically arranged and applicable to any animal, and as I use a name I so designate it on the book that I may not use the same name a second time; thus I am better able to keep a run of my animals than I would otherwise be. When I can do so without repetition I prefer to give a foal a name that will identify the family to which he belongs.

For instance, a filly desirable for a brood mare may have the name of some flower, and to all of her descendants may be given the names of flowers.

Or, the family lines may be sufficiently marked by giving one mare and her descendants the names of cities, villages, or towns; to others, the names of poets, novelists, or other writers, and such names as they have chosen for their works.



DANIEL LAMBERT.
The great New England sire of trotters and roadsters.

CHAPTER XXI.

BREEDING THE AMERICAN TROTTER.

Speed attractive feature — Only few trot fast — Breed for beauty, size, style, and action — Demand for first-class roadsters in advance of supply — Easier to breed beauty than speed — The standard craze — French ahead of Americans in systematic breeding — Selecting breeding stock — The most modern breed — Color — Hambletonians — Mambrino Chief — Blue Bull — Early foals — Good care important — High prices for.

THE general principles of horse-breeding as laid down in another chapter are, of course, as applicable to breeding the American trotter as to that of other breeds; nevertheless, I feel that the importance of this breed in America requires a more special notice than I have given in my general principles of horse-breeding.

In breeding the American trotter, speed is one of the most attractive features of the whole business, but it should ever be borne in mind that to breed for speed alone would be the height of folly.

Every breeder who has carefully studied the matter knows full well that only a small portion of well-bred trotters go fast; consequently, when we select our trotting-bred sires and dams for the purpose of producing fast trotters we must bear in mind that not more than one out of every twenty will make a fast trotter, while the other nineteen will be left on the breeder's hands, and for what purpose?

Well, if proper attention and good judgment is given in the selection of the parents, out of these nineteen colts that cannot trot sensationally fast, at least fifteen of them will sell at remunerative prices as roadsters and business horses, or for breeding purposes, as they will have good size, style, action, and be possessed of enough beauty to make them an article of ready

sale in any horse market of America; but, if we breed for speed alone without the other considerations, and get a little animal that is not a fast trotter,—then what? Why, we had better have raised a steer or mule with the same food and less trouble and expense.

The breeding of fine, stylish roadsters should prove a valuable auxiliary to the trotting-horse breeder whose main object may be speed; consequently animals with not enough speed for the trainer for fast records, may yet, if backed with endurance and a handsome form, with good disposition, be a source of profit to the breeder and add to the wealth of the community in which he is bred.

Then, again, the demand for stylish, well-formed, spirited, but withal, level-headed and kind horses for the road has always been in advance of the supply. To breed trotters, the culls of which (as to phenomenal speed) will be of this class, the breeder should not only select as the sire a stallion from the great families of sires so known to fame, but secure the best individual specimens of strains that have excelled in producing trotters, and breed them to mares that have stamina, size, style, form, and endurance.

Speed and the ability to produce speed are desirable characteristics in a trotting sire and make a strong combination. It is much easier to breed beauty than speed, and, on the whole, perhaps quite as profitable in the long run. Beauty of form and carriage does not detract from speed, and what is more worthless than a homely trotter that has not speed enough to be of any account as a race-horse, nor yet has the qualities necessary to a good road-horse, and is not even fitted by nature to be a good work-horse? So, I reiterate: "Breed horses for beauty, brains, and business." The first quality will always attract customers who can and will pay the highest prices; and brains—good horse sense—is an important factor in a horse for any purpose.

The standard craze, based simply on the merits of speed alone for a single mile, has injured the trotting-horse interests

of America more than anything else could have done; it has filled the country with worthless brutes, unsuitable for any use whatever, except, perhaps, a single season's gambling implement; and on the simple achievement of this single season they have — both stallions and mares — been placed at the head of our best American stock farms.

This is not business-like, and will never permanently succeed. Although a firm believer in pedigree itself, I think it not to be considered unless merit as well as speed is behind the individual. The standard craze amounts to nothing unless backed by individual merit. Pedigree is all right, but standard-bred horses eligible to registry as such, without an animal to correspond with the pedigree — as often witnessed in combination sales when highly-bred stock will not sell for half enough to pay for their service fees — is a highly deplorable state of things, plainly showing that there is a screw loose somewhere.

This standard business may be carried a little too far when it admits everything bred in a certain line, without paying any regard whatever to the animal so bred as being worthy of use for breeding purposes, and rejecting many much better and also well-bred animals because they do not come up to the standard in breeding according to set rules.

How many gentlemen breeders among my readers have sold good, well-bred mares for a nominal price because they were non-standard according to the rules, and replaced them with others much inferior at long prices, simply because they were standard? How many good colts have been gelded because of being non-standard, and their places usurped by inferior animals both as to meritorious breeding and individual merit, that were standard? That the standard and the standard number has discarded many a good animal, filling their places with inferior ones, none of much observation and experience can deny.

I like good breeding and fashionable pedigree as well as any man, but what I consider of more importance, and what has given me better results and greater satisfaction, is individual

excellence and positive qualities. Pedigree often sells trasn at fancy prices.

I do not wish to be misunderstood in this matter of horse registration and the standard. It is all right and proper that we have a registry, a standard, and a standard number for each registered animal. But my idea in this matter is, I presume, an original one, and many breeders may not agree with me, but I believe no stallion colt should be eligible to record as standard to be kept for breeding purposes until attaining suitable age and development, and subjected to an examination of a competent, disinterested committee, duly and intelligently appointed for the purpose of ascertaining his individual qualifications — breeding included — to entitle him to a place on the registry as standard-bred and worthy of public patronage.

If this rule should be adopted and strictly adhered to, then we should soon be rid of standard-bred weeds and no-account animals as public sires.

The French, as a nation, are far ahead of us Americans as to selecting and controlling the use of public stallions. (See The French Coach Horse, Chapter XIII.)

As to the standard as it now stands, neither Electioneer, Nutwood, George Wilkes, Red Wilkes, nor Alcantara would be admitted as standard *bred*, while the book stands wide open for the registration of countless numbers of worthless weeds or culls.

Lucas Broadhead, agent of the famous Woodburn Farm of Kentucky, says that he "would rather have a horse that is well bred according to the general idea of what a well-bred horse is, than to have a horse that trotted in 2.30, and a man that breeds to a horse without a pedigree, with speed, will be excelled by the man who breeds to a pedigree without speed." He can point to Woodburn as almost uncontrovertible proof of his position.

No pedigree can be a good one that does not generally produce good animals; no pedigree should be prized above other pedigrees unless it usually produces better animals. If tried by

this test any pedigree that fails, no matter how much it has been idolized, its value is fictitious, and its effects are injurious to the breeding public.

High strains of blood from a powerful race, coupled with individual merit, constitute the standard of value with me. I want no weeds as breeders, whether standard-bred or not.

The breeding of the trotting horse has been likened to catching a good wife in Paris, which, in turn, has been described as grabbing for one eel in a basket of snakes, and should not be entered into with the expectation of making it a success by the careless and indifferent.

To successfully breed the American Trotter, great skill, care, patience, and perseverance are required, more so than for the breeding of any other animal. The reasons are obvious.

Firstly, it is a new breed scarcely fairly established, and to firmly place it as a recognized breed the world over there can be no more fooling or carelessness on the part of the breeders.

SELECTING BREEDING STOCK FOR THE AMERICAN TROTTER.

In selecting breeding stock as the foundation of a stud for the purpose of breeding the American Trotter the judicious breeder will discriminate between the speedy, flashy weed, and the horse of both speed and stamina; between the little homely, ungainly animal (even though holding the world's record at the time) and the good-sized, symmetrical, beautiful, level-headed, well-bred animal, that would attract attention anywhere, even though the latter has not attained as fast a record as the little plug-ugly before mentioned.

The American Trotter is the most modern of all the breeds mentioned herein, and, whatsoever others may say, there is still great need of an established type in this American horse; a more uniformity in likeness, size, speed, disposition, and general characteristics; and the breeder who does most to secure all of these will also secure the thanks of the horsemen of the 20th century.

Size, color, disposition, and soundness should not be sacri-

ficed to speed alone; and the breeder making these sacrifices will as surely "get left" as the sun is sure to rise in the east or the moon to get full once every month.

Color is merely an individual fancy; but in fixing the type of the American trotting horse perhaps this matter should receive due attention. In selecting foundation stock for breeding choose the best individual animals obtainable from the best trotting-bred families and of good trotting action. As to the brood mares being registered as standard I care little; I prefer good individual trotting-bred mares that can trot, to standard-bred and registered weeds that cannot.

For the sire or dam of a colt to make a trotter of I prefer a 2.30 animal that is a natural, level-headed trotter, and that can trot fairly and squarely off-handed without weights or boots, and can continue to do this, to any animal requiring such an amount of extra harness and trapping that its best acquaintances will fail to recognize it when fitted for the race, even if by these artificial appliances they can be made to trot in 2.04.

I may be called an old fogy for advocating such notions, in this, the 19th century, but such opinions will, I am confident, bear the strictest investigations, and in the long run will prove themselves true every time when applied to the breeding of our fastest and best trotters. Give me natural, not artificial, trotters from which to breed trotters, is the whole thing in a nutshell.

The trotting horse should not be bred simply for racing alone or for wealthy gentlemen to drive on the road, singly or in pairs; but he raises the general standard of the horse for all work and because of his quick stride and great endurance is both profitable and serviceable for general use. The breeder of the trotting horse of to-day should ever bear in mind that of all the trotting-bred animals bred and raised but a small proportion will ever become sensational trotters, and the great majority must find employment elsewhere than on the trotting-course; consequently the importance of breeding only such

individual animals as may be both useful and serviceable outside of the speed-ring.

To further illustrate my idea in breeding speed from trotting-bred animals other than those of the fastest records, we will take as a case in point, Arion, 2.07¾, who had no trotting ancestor, either male or female, with a record of 2.30 even, except Nutwood, 2.18¾; and right here, in the breeding of Arion, we find a strong argument for the late Leland Stanford's theory for selecting, as brood mares to breed to trotting stallions, the best thoroughbred race mares — those that could race and win; not culls or weeds, to be obtained as dams of fast trotters. He proved to the world beyond a doubt that his theory was, in the main, correct; but shall we continue on in the course? I say no. For just as long as we continue to do so we put off what we desire to accomplish, and postpone the day of establishing the American Trotter as a distinct and world-recognized breed. With establishing this breed as with establishing the English Thoroughbred there is a time to stop experimenting with all outside issues. There is not a shadow of doubt but the thoroughbred has done his full share in establishing the American Trotter as we find him up to date; neither is there any doubt but the Arabian horse has done his full share in producing the thoroughbred; yet it appears that the English breeder knew when he had got enough of the Arab, and stopped. I claim that the American breeder has enough of the thoroughbred, now, as a cross on the trotter, and should, therefore, stop and confine himself strictly to breeding the American Trotter from trotting-bred ancestry of stamina and race-qualities at the trotting gait.

Were I to commence the business to-day of breeding the American trotting horse I should select for my breeding stock on both sides from the oldest and best families of trotters that have trotted and have done most to achieve the great popularity of this breed in America or the world; and not from any whirlwind, phenomenal, come-by-chance trotter or pacer, although he or she might hold the world's record at the time.

I like to have trotting stock for breeding purposes trace to such animals as Rysdyk's Hambletonian through his best bred sons, among which I consider embraced (alphabetically), Administrator, Alexander's Abdallah, Ajax, Dictator, Dauntless, Electioneer, Egbert, George Wilkes, Happy Medium, Harold, Jay Gould, Messenger Duroc, Strathmore, Sweepstakes, Volunteer, and Victor Bismarck.

I don't claim that this list embraces all the sons of Hambletonian worthy of patronage, but I know that all of those contributed largely to the establishment of the Hambletonian family of the American Trotter of the period. However, in the above list I have my own preferences, and especially so as regards selecting the stallion; as some of them were much better brood mare sires than that of stallions.

Mambrino Chief was another great progenitor of trotters — mainly through his daughters — and pedigrees tracing to him are well worthy of consideration by the breeder of the American Trotter.

Animals tracing to Imported Belfounder other than through Hambletonian are also well worthy of consideration; especially those tracing to him through Green's Bashaw. Those tracing to Vermont Black Hawk, especially through Daniel Lambert, are usually desirable for the stud; as are also all animals tracing to old Imported Diomed. As to Blue Bull, that great progenitor of trotters from cold-blooded Indiana mares, although his breeding cannot and perhaps will not ever be correctly ascertained, I have no doubt but he was a well-bred horse and I should have no hesitancy in breeding to him through his best-bred sons and daughters.

Breeders of all classes of race-horses should bear in mind that early foals are preferable in every way to late ones. The reasons are obvious; the early foal gets a good start and is better able to withstand that great torment to all horse flesh, the fly, which is so annoying to all horses, old and young, in the field and in the stable. Foals dropped late in the spring or early in the summer months, are not infrequently killed out-

right—in some localities—by these merciless and annoying insects; others have their growth more or less retarded from the same cause.

More than this—an early colt may be weaned in time to become accustomed to solid foods and can more easily be kept in good condition during the first winter, coming out in the spring strong and vigorous.

Another important item of consideration to the trotting-horse breeder is, that all registered animals and all eligible racers' ages are reckoned as commencing with the year; so a colt foaled on January 1st stands equal with one foaled on the 31st of December, of the same year. Consequently the earlier in the year the foal is dropped the more advantage it has as regards age; and this item alone is of vast importance in raising horses for the turf or track. Aside from this advantage it is generally conceded that the early foal will always make a larger and stronger animal than the later one. What I mean by the later one, in this connection, is the one dropped in the late spring or during the summer or early fall months.

In most of the middle and western states, however, I should prefer—other things set aside—to have the foals come in October and then carefully house and feed them with the dam during the winter. They will then be able to go out to grass early in the season and be better able to withstand the murderous puncturings of the flies.

Good care is the grand secret in horse-raising, second only in importance to that of blood, which is purely an inherited quality and a lack of which no after care can ever compensate. Abundant opportunity for exercise in the fresh air is an absolute essential to a healthy development of all young animals; it is not sufficient that the colt be led out at regular intervals for his exercise; he needs and should have the opportunity to romp and play.

A stirring up of spirit that causes him to extend his muscles to the outmost and expand his lungs to their very depths, and to send the blood coursing through his veins with fiery vigor;

—all of these are essential to a healthy and full development, and nowhere can it be attained equal to the freedom of the field.

Still, even in pleading for this wild freedom for the growing colt, I do not wish to be misunderstood. I do not advocate the starving, freezing process through which so many youngsters are obliged to wend their ways to horsehood. A stunted, half-starved animal of any breed will never attain to so perfect physical development as one that has been well fed and cared for. The true policy in developing the healthy growth of the American trotter is by a generous supply of nutritious food and by permitting them to romp and race and play at will. By so doing we will secure a healthy and full development of heart and lungs, of bone and muscle.

As to the general management of the foal of the American trotter it should not vary much from instructions heretofore given in the management of foals in general. (See Management of Foals, Chapter XX.)

Handling and training will come under another head. (See Breaking and Training, Chapter XXVIII.)

HIGH PRICES FOR TROTTING HORSES.

American-bred trotting horses have been sold for the following high prices:

Arion, blk. c., three years, by Electioneer, dam Nanette by Nutwood, $125,000.

Axtell, b. c., three years, by Wm. L., son of George Wilkes, dam by Mambrino Boy, $105,000.

Anteo, b. c., by Electioneer, dam Columbine by A. W. Richmond, $55,000.

Bell Boy, b. c., by Electioneer, dam Beautiful Bells by The Moor, $51,000.

Stamboul, blk. c., by Sultan, dam Fleetwing by Hambletonian, $50,000.

Nancy Hanks, b. m., by Happy Medium, dam Nancy Lee by Dictator, $45,000.

Sunol, b. m., by Electioneer, dam Waxana by Gen. Benton, $41,000.

Acolyte, b. h., by Onward, dam Lady Alice by Almont, $40,000.

Maud S., c. m., by Harold, dam Miss Russell by Pilot, Jr., $40,000.

Smuggler, br. h., by Blanco, dam untraced, $40,000.

Pocahontas, b. m., by Ethan Allen, dam Pocahontas by Iron's Cadmus, $40,000.

Rarus, b. g., by Concklin's Abdallah, dam Nancy Awful by Telegraph, $36,000.

Antevolo, b. h., by Electioneer, dam Columbine by A. W. Richmond, $35,000.

Jay Gould, b. h., by Hambletonian, dam Lady Sanford by American Star, $35,000.

Dexter, br. g., by Hambletonian, dam Clara by American Star, $33,000.

Goldsmith Maid, b. m., 2.14, by Alexander's Abdallah, dam Old Ab by Abdallah (1), $32,000.

The King, b. g., by George Wilkes, dam Jewell by Gill's Vermont, $31,000.

Lady Thorne, b. m., by Mambrino Chief, dam Rhodes' mare by Gano, $30,000.

Blackwood, blk. h., by Alexander's Norman, dam by Mambrino Chief, $30,000.

Prince Wilkes, ch. g., by Red Wilkes, dam Roe's Chief by Brown Chief, $30,000.

Pancoast, b. h., by Woodford Mambrino, dam Bicara by Harold, $28,000.

Gov. Sprague, blk. h., by Sprague's Hambletonian, dam Belle Brandon by Hambletonian, $27,500.

Patron, b. h., by Pancoast, dam Beatrice by Cyler, $27,500.

Constantine, b. m., by Egbert, dam not traced, $27,000.

George Wilkes, b. h., by Hambletonian, dam Dolly Spanker, pedigree untraced, $25,000.

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

Nettie, b. m., 2.18, by Hambletonian, dam Countyhouse Mag by American Star, $25,000.

Gazelle, b. m., by Hambletonian, dam Hattie Wood by Harry Clay, $20,000.

Twenty-seven trotters sold for $1,104,000, or an average of $40,900.

Sixty-nine head of colts and fillies, all sired by Electioneer, sold at auction in New York city in 1891 for $68,105, an average of $987.90.

Mares in foal should never be used for horseback riding. Many abortions have occurred by neglecting to observe this rule.

CHAPTER XXII.

OLD TIME TROTTERS.

Topgallant — Ripton — Lady Suffolk — Flora Temple — Ethan Allen — Geo. M. Patchen — Geo. Wilkes — Goldsmith Maid — American Girl — Dutchman — Americus — Dexter — Columbus — Betting on races — Lady Suffolk (*In Memoriam*).

"Should auld acquaintance be forgot,
And never brought to min' ?
Should auld acquaintance be forgot
And days o' lang syne ?"

AMONG the old-time trotters who have contributed their share toward creating and establishing an interest in the American trotter, and who have afforded much pleasure to the lovers of fast trotters, and who have occasionally electrified the trotting world by their marvelous performances on the turf, but who have long since gone the way of all flesh, I will mention a few of the most noted in their day; and to give my readers some sort of an idea as to how the trotting business was conducted in the past, I have selected ten noted trotters of their day, which we will — partially, at least — follow through their campaigns.

We will commence in 1829 with old Imported Messenger's son, TOPGALLANT; then, in order, comes a somewhat noted son of Sherman Morgan, called Ripton; then the much-abused gray mare, Lady Suffolk. Next comes that wonderful little mare, Flora Temple; then the noted son of Black Hawk, and the King of the Morgans, Ethan Allen; then will come the brown stallion Geo. M. Patchen, with a race record of 2.23½; then the founder of the Wilkes' family, George Wilkes, 2.22; then the reigning queen of her day, Goldsmith Maid — the first to lower the trotting record to 2.14; then the invincible Dexter, the great horse of his time who so long held the world's

trotting record of 2.17¼; and finally, that honest and gamy race-mare, dying in the harness and now lying under a monument perpetuating her memory, American Girl.

Many others might be mentioned in detail, some of whom may be as worthy of mention as any of these, but in a work like this it should not be expected.

It will appear that in the trotting races of fifty or sixty years ago (and even more than that), this sport was highly interesting and entertaining to many of the good citizens of those days, and ever has been more or less so since the days of the earliest Morgans, more than ninety years ago. It is supposed that then, as now, betting on the results of the races was considered much the same, as

"A noble, virtuous citizen
Is he who backs the winner;
But he who backs a losing nag
Is a gambler and a sinner."

Topgallant was a dark bay horse foaled in 1808, on Long Island, N. Y. He stood fifteen-three high; he was plain and raw-boned but had rather a fine head and neck, and eyes expressive of much courage. His sire was old Imported Messenger.

Topgallant was surely an old-time trotting horse and one of the best of his time; and, being a son of old Messenger, his exploits on the turf had much to do with directing the attention of the trotting world to Messenger and his stock.

In speaking of this old-time trotter, the late Hiram Woodruff in the "Trotting Horse of America," says: "He was, in fact, in some respects the most extraordinary trotter that ever came under my observation. In the capital points of longevity and endurance I have never known quite his equal, all things taken into account. When I say longevity I mean the length of days while serviceable as a trotter, and able to meet and beat very often the best of his time. I do not mean vegetating, about half dead at the root and rotten at the trunk, as many of the horses spoken of for their longevity have been.

I speak of old Topgallant as one of the best and stoutest that ever looked through a bridle. When I first knew him he was spavined in both hind legs.

"His spirit was very high and yet he was so reliable that he would hardly ever break, and his bottom was of the finest and toughest quality. He was live oak as well as hickory, for the best of his races were made after he was twenty years old. He was more than fourteen years of age before he was known at all as a trotter except that he could go a distance the whole length of the 'New York road' as well as any horse that had ever been extended on it.

"Topgallant then belonged to a gentleman by the name of Green. In the year 1829, when in his twenty-second year, he trotted four-mile heats against Whalebone over the Huntington Park course, Philadelphia. There were four heats before it was decided. Topgallant won the race after a desperate struggle. Time 11.16, 11.06, 11.17, and 12.15. This old horse of twenty-two years old that could trot four four-mile heats that would have made sixteen miles in less than forty-six minutes, and who could easily have gone his twenty miles in an hour, had it been twenty miles against time, may justly be considered as one of the shining landmarks of 'ye olden time.'

"But if we follow him into his twenty-fourth year, 1831, two years after the great race above alluded to, when he and Whalebone and six others of the best of their time met at the Huntington Park course at Philadelphia and trotted a race of three-mile heats, we find that there were eight trotters in this race — Dread, Topgallant, Collector, Chancellor, Whalebone, Lady Jackson, Moonshine, and Columbus. The race was under saddle and was one of the greatest and most exciting races of the year. These horses all trotted twelve miles in this race, old Topgallant winning one heat and was second in the last heat."

The following week in Baltimore, in a race of three-mile heats against Whalebone, Topgallant won; thus showing in a marked degree the tremendous endurance and recuperative

energy of that wonderful horse's constitution. Topgallant lived to be twenty-eight years old.

RIPTON.

Ripton was a very handsome bay gelding with four white legs and a blaze in the face. He was bred in Ripton, Vermont, foaled in 1830. He was sired by Sherman Morgan and his dam was a granddaughter of old Justin Morgan.

Ripton was a well-bred Morgan and one of the best of his days, but on account of his bad white markings was gelded at the age of two years, and then on account of his high life and great natural speed at the trot, he was taken to the New York market when five years old — in 1835; when, after being given a trial mile in harness on the Centerville course — being the first time he ever stepped on a race track — he made his mile in the finest and handsomest style that had ever been shown on that track, driven by an entire stranger to him, Joel Conklin, in 2.46. He was purchased at a high price by Peter Barker, who owned the great trotting horse, Dutchman, at the time. He was afterwards sold to George Weaver of Philadelphia, and went into the hands of Trainer James Hammil.

Ripton was a small horse, not exceeding fifteen hands high, of the old-fashioned Morgan type. He was marked almost exactly like Dexter, the exception being that in the case of Ripton the white on one fore leg ran higher up than the other, consequently it gave him the appearance, when going very fast, of lifting that foot higher and slapping it down with extraordinary vim, yet this was a mere optical illusion.

Hiram Woodruff, in speaking of Ripton, says: "He was a powerful horse of uncommon fine spirit and determination, and his style of going was very fine. He went as level as the flow of a smooth stream that is both swift and deep; and could trot fast, smooth, and honest."

In breeding Ripton's pedigree was not unlike his illustrious successor from Vermont, Ethan Allen, and his way of going was much the same. His first race was with Mount Holly,

whom he beat quite handily in two straight heats. Ripton then passed into the hands of George Youngs, who was quite celebrated as a rider and driver of trotting horses. He was brought back to New York and trotted over the Beacon course, mile heats, three in five, in harness against Kate Kearney.

Kate was a bay mare about 15–1 in height, and at that time belonged to Stacy Pitcher. Ripton won in good time. When ten years old he was put into the hands of that Napoleon of horsemen, of his day, the late Hiram Woodruff. Hiram said of him at that time: "He has all the requisites to make a very fine trotter," and such he afterwards became. When Hiram had trained Ripton two months he captured with ease a two-mile race with him against Don Juan in 5.19 and 5.23.

Ripton was a stout horse of great game and bottom, and required much hard work to bring him to his best racing condition. His first trot in 1842 was in May over the Beacon course, two mile heats in harness against Confidence and Lady Suffolk. In this race Confidence was the favorite, but Ripton won the race in two straight heats, in 5.10½ and 5.12½. He won a race in September of this same season, greatly distinguishing himself in a two-mile race over the Huntington Park course, Philadelphia, by beating Lady Suffolk and making the then unparalleled time of two miles in 5.07 in the first heat. The accomplishment of this feat in harness caused great excitement among trotting-horse men; it being similar to that when, in after years, Flora Temple outdid herself, and, morally, distanced all that had gone before by trotting a mile in harness below 2.20.

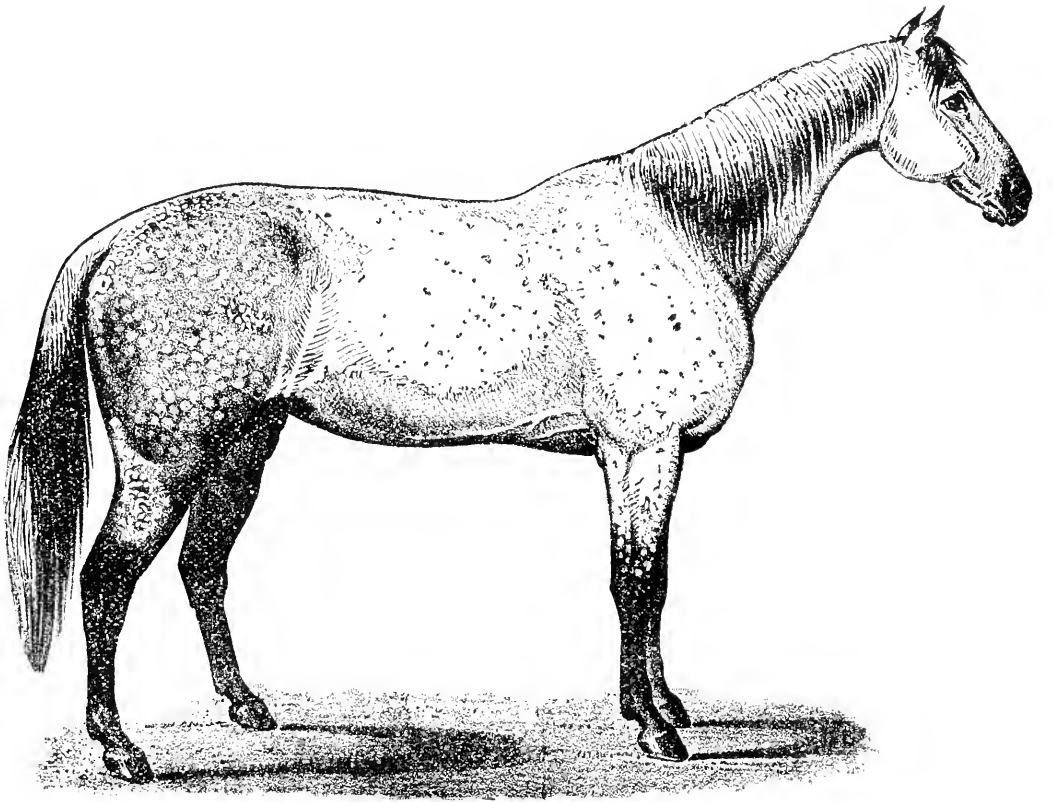
In a race against Brandywine and Don Juan, Ripton was timed a half-mile in the then unparalleled time of 1.11½. This little horse, son of old Sherman Morgan, was a great horse of his time and was considered at his best after he was twelve years old, and after having been raced and campaigned against the greatest and fastest of his day for seven years, and ridden and driven in his races by many different riders and drivers.

As before stated, Ripton was a horse able to stand, and, in fact, requiring a great amount of work in his preparations for a race, and with the same amount of work that trainers of other horses of less spirit and stamina would dare to give them, he would be practicably unmanageable in a hotly-contested race. When at his best he was considered the fastest little horse on the American Trotting turf. He was a very horsey little horse, a product of the Green Mountain State, and a fair representative of the old-time Morgans.

In recapitulating the performances of Ripton in 1842, by Hiram Woodruff, we find that he trotted in that year as follows: First, two-mile heats in harness, which he won in two heats, beating Lady Suffolk and Confidence; second, two-mile heats in harness, which he won in three heats, beating Lady Suffolk; third, two-mile heats in harness, which he won in two heats, beating Lady Suffolk and Washington; fourth, two-mile heats in harness, which he won, beating Confidence; fifth, two-mile heats to wagons weighing 187 pounds, which Confidence won in three heats; sixth, three-mile heats in harness with Confidence and Lady Suffolk, which he won; seventh, mile heats to wagons with Americus, which Americus won in two heats; eighth, three-mile heats in harness with Americus, which Ripton won in three straight heats. Ripton trotted fourteen two-mile races and five three-mile races that season, and of these he won thirteen.

Hiram Woodruff said that Ripton, of all the horses he ever had, was one of those that required the most work. "He was so resolute and game, and his spirits were so high, that if not kept down by a good deal of steady work he was almost certain to run away as soon as he was suffered to go fast; with the work that most horses required he would be almost or quite unmanageable."

Yet there was no vice about him, but the exuberance of his spirit was such that when he was at all indulged he would run away from mere fun.



LADY SUFFOLK, 2.26.
Old time trotter and campaigner, foaled 1833, died 1855.

LADY SUFFOLK.

Lady Suffolk was a gray mare, bred in Suffolk County, Long Island, N. Y., by Leonard W. Lawrence of Smithstown. She was foaled in 1833; her sire was Engineer, 2d, a thoroughbred son of Engineer by Imported Messenger, and her dam was Dusky Jane by Don Quixote, a son of Imported Messenger. She was, consequently, a strongly in-bred Messenger mare. She was sold at weaning time to R. F. Blaydenburgh for $60. She was again sold when four years old to David Bryant for $112.50. When young she was an iron gray in color, but in her old age she became almost white. She was about fifteen hands one inch in height; she was well and strongly built, long in body, back a little roached, powerful, long quarters, hocks let down low, short cannon bones, pastern joints fine, shoulders good, slim but muscular neck, a rather large, long, bony head, and big ears. Her feet were small and crimpy — called mulish feet — but were sound and as tough as iron.

Her first appearance on the turf was on a very cold day in February in 1838, at Babylon, N. Y., where she trotted for and won a purse of $11 in three heats, the fastest heat of which was three minutes.

In her next race, June 20th of the same year, at Beacon course, she was beaten by both Black Hawk and Apollo in poor time, but, two days afterwards, at the same place, she won a race of two-mile heats under the saddle, beating Lady Victory, Black Hawk, Cato, and Sarah Puff in two heats in 5.15 and 5.17. After which she was beaten by Rattler, Awful, and Napoleon, all of these races two-mile heats, and October 17th she beat Polly Smallfry and Madam Royal, two-mile heats, in 5.18 and 5.26.

Rattler then beat her three-mile heats, and Dutchman beat her two races, two-mile and mile heats respectively. In 1839 she trotted twelve races, eight of which were two-mile heats and one of four-mile heats, winning six and losing six.

In 1840 she commenced the season by trotting two-mile heats under the saddle at the Huntington Park course, June

6th, against Dutchman, and was beaten. Two days afterwards Dutchman again beat her over the same course in three-mile heats.

In less than a week after these two severe races she beat Celeste and Napoleon on the Centerville course, Long Island, in harness, 5.26, 5.33, and 5.32.

June 30th, on the same track, she beat Bonaparte easily, four-mile heats, in 11.15 and 11.58. Her next race was with Aaron Burr, two-mile heats at the Beacon course, September 21st, when she beat him in 5.22, 5.21, and 5.35; and, three days later, on the same course, she beat Dutchman, two-mile heats under saddle, in 4.59 and 5.03½.

The opening of the season of 1841 found the little gray mare again at the Centerville course, where she, on the 4th day of May, beat Confidence and Washington, two-mile heats, in 5.13½ and 5.41. This was quite a successful season for the gray lady, and during it she beat such good ones of that period as Confidence, Washington, Dutchman, Ripton, Awful, and Oneida Chief.

The next two seasons were generally unsuccessful, which was universally attributed to the obstinacy and incompetency of her owner and driver, David Bryant, a very hard master, who used her very cruelly, it is said. It is thought that had she been handled by such a competent trainer and driver as Hiram Woodruff that her defeats throughout her whole career would have been few and far between.

In 1844 she was very successful, beating such good ones as Dutchman, Ripton, Washington, Americus, and Columbus.

In 1845 she won four races and lost four. In 1846 she only won two out of five races. In 1847, when in her fifteenth year, she bore away the palm from all her competitors, among which were Moscow, Lady Sutton, Ripton, as trotters, and the pacers were James K. Polk and Roanoke. She won eight races and lost but one this season, and her performances were at three, two, and one-mile heats, under saddle, in harness, and to wagons.

Her fastest time for three miles this season was 7.56, two

miles 5.03, and one mile 2.33½. She only trotted six races in 1848, having met with an accident in the middle of the season, when she was winning races right along.

In 1849 she trotted nineteen races and captured twelve of them, beating Gray Eagle, Mac, and Lady Sutton each twice; Pelham five times, the famous twenty-miler, Trustee, four times; Black Hawk, Gray Trouble, Ploughboy, and others. She reduced her record this season to 2.26 under the saddle, which was the world's record at that time.

In 1850 she beat Lady Moscow six times at one, two, and three miles; Jack Rossiter three times, Hector once and in harness once, and beat James K. Polk, the pacer, to wagon.

In 1851 she was moderately successful. In 1852, when nineteen years old, she trotted twelve races. In 1853, when twenty years old, she entered into two races, but was defeated in both, thus ending the turf career of one of the best of our old-time trotters, after appearing on the American trotting turf every season for fifteen years.

Lady Suffolk died at Bridgeport, Vt., on March 7, 1855, at twenty-two years of age.

LADY SUFFOLK.

In Memoriam.

For fifteen years the virgin queen
And mistress of the turf;
Most nobly did she win the name
As queen of trotting course.

Amid the pouring of the sweat
And flying of the fur,
She never quailed beneath the whip
Or fluttered at the spur.*

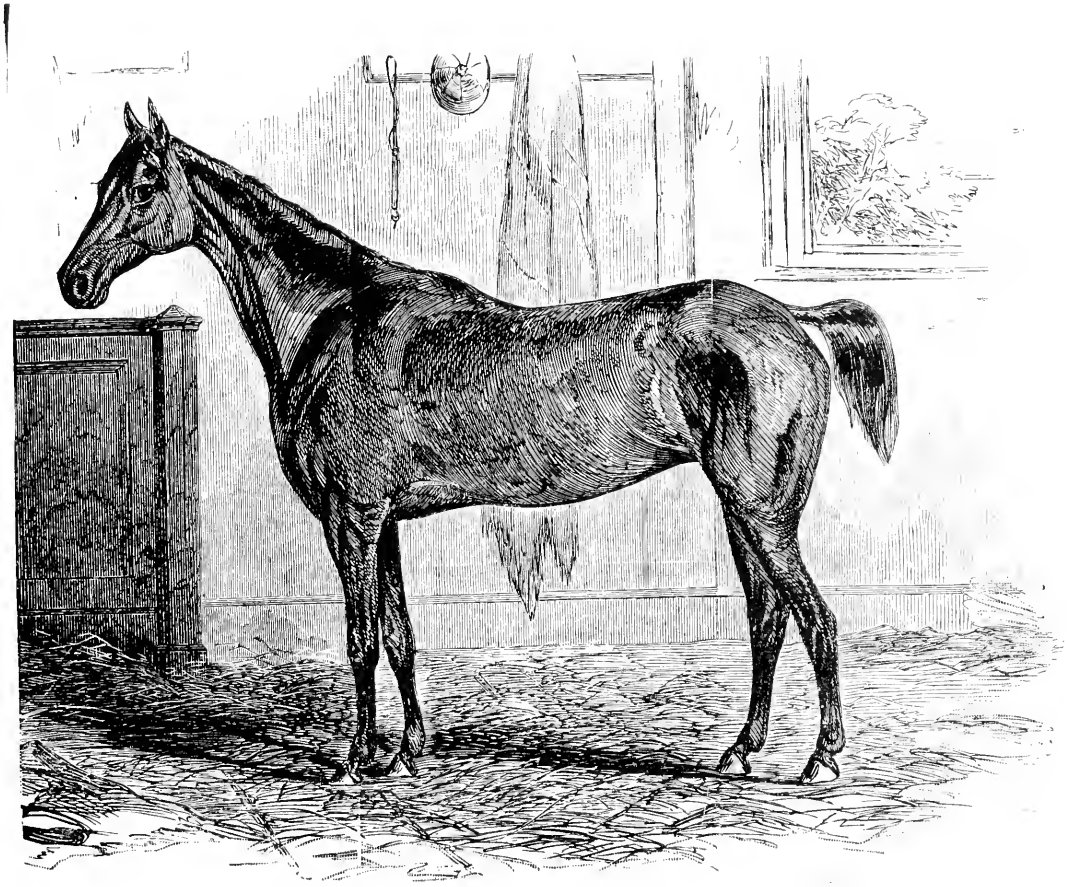
As freely flowed her purple life
She mutely bore the pain;
Winner of the hard-fought strife,
This foal of Dusky Jane.

*She had a very cruel master, who lashed and spurred her most shamefully in her races.

Ten thousand eyes have danced to see
Her snowy tail unfold;
Ten thousand ears have bent to hear
Her time, by judges told.

At Boston, Cincinnati,
On Alabama's plain,
With victor's wreaths they crowned her,
Daughter of Dusky Jane.

A man proves himself fit to go higher when he is faithful where he is. Whatever you do, do it well, and advancement and success are sure to follow. "There is a tide in the affairs of men, which taken at the flood leads on to fortune; omitted, all the voyage of their life is bound in shallows, and in miseries."



FLORA TEMPLE, 2.19¾.
Old time campaigner, first to lower trotting record below 2.20.

CHAPTER XXIII.

OLD-TIME TROTTERS. — *Continued.*

Flora Temple — Pedigree and place of breeding — Sale for $13 when four years old — Sale to Jonathan Vielee — Sale to George E. Perrin — Her first race — Her peculiar race with Whitehall, Delaware Maid, etc. — Races in 1852 — Her sale in 1852 for $1,000 — Her races in 1853 — Flora's great race with Lancet for $3,000 — Sale in 1858 for $8,000 — Race with George M. Patchen — Last race in 1861 — Confiscated to United States Government — Sold when 19 years old for $8,000.

FLORA Temple was foaled in Oneida county, near Utica, N. Y., in 1845. She was bred by Samuel Welch, and sired by One Eyed Hunter, a son of Kentucky Hunter, thoroughbred. Her dam was Madam Temple, a little bay mare said to be the very picture of herself, and sired by a spotted horse. She was, when full grown, 14–1 in height. As docking was fashionable in those times, she was docked with a jackknife before she was an hour old, and she stood on her feet at that time, and had the same gray hairs at the root of her tail that she carried through life, which was all the white markings connected with her.

Her owner at four years old, a Mr. Tancy, finding her so willful as to be unserviceable to him, sold her for $13 to Wm. H. Congdon of Smyrna, Chenango county. Mr. Congdon, after keeping her awhile, sold her to Kelly and Richardson for $63, and after changing hands once or twice more (as she was trading goods) she fell into the hands of a drover buying cattle for the New York market, at $80. This drover sold her on the way to New York to Jonathan Vielee, a horse dealer of Washington Hollow, Dutchess county, for $175, who sold her shortly afterwards to George E. Perrin of New York city for $350.

In the hands of Mr. Perrin, the little bay mare that had

proved so intractable, so flighty, so harem-scarem, and, to come to the true expression, so *worthless* to her original owners, was favored with more advantages than she had previously enjoyed. She was not only introduced to the very best society of fast goers on the Bloomingdale and Long Island roads, but she was taught that when flinging herself out "with exuberant and superabundant spirit" (all over the road, as it were) to play her limbs in a true line, and give her extraordinary qualities a chance to show their true value. Whenever she made a skip, a quick admonition and a steady check brought her to her senses, and when in the frenzy of excitement in being challenged by some high-flyer of the road, she would, as the horsemen used to say, "travel over herself" and "go up" into the air, she was steadied and settled down by a firm rein into steady trotting and good behavior instantly.

The crazy, flighty, half-racking and half-trotting little mare soon became a true stepper, and abandoned her confused "rip-i-ty clip-i-ty" way of going, substituting in its stead a clean, even, long, low, locomotive trotting stroke.

Many a man, on coming up to a tavern after having been beaten by her, would say to her owner, "That's a mighty nice little mare of yours, and if she were only big enough to stand hard work, you might expect a good deal from her."

There was at that time, as there have ever since been, many horses of great repute upon the roads in the vicinity of New York, and among those who occasionally came in contact with the little bay mare was one of considerable speed, called the Waite Pony.

This Waite Pony received the greatest surprise of his life one afternoon in the summer that Flora "came out" — 1850 — by her beating him to a stand still on a mile stretch of the road. This deed of the little mare led to an after matched road-race with the pony, which was virtually the first race of her life, and she captured it very handily. As, however, the time made in this race was over three minutes, it did not in-

crease the reputation of the mare so much as it discounted her competitor.

A match was soon afterwards made between her and a horse known as Vandeburg's Black Stallion, for $500 a side, mile heats; the stallion in wagon and Flora to go in harness. This race came off at the Union course on Long Island, and was easily won by the mare in three straight heats.

Her next exploit was on September 9th of that same year and on the same course. The circumstances of her entering into this race were quite peculiar, as she was not entered until after arriving upon the ground on the day of the race. She was not in racing condition, as on the previous day she had been driven very hard, and, on coming home at night, was treated with a "warm mash" and virtually put to bed. On the next morning, however, she looked so fine that her owner decided to drive her over to the track, as he wished to see the races; and on the road she behaved so well and passed so many going down the road that he concluded "just for luck" to let her try her mettle for the purse.

The race was mile-heats in harness, and the horses entered were Whitehall, Delaware Maid, Napoleon, and Hiram. The first-named horse, a fine brown stallion, was the favorite in the race, but all the others were considered good; and their owners, being very popular trotting men, had given considerable interest to this race.

It was considered a bold and foolhardy exploit to enter that comparatively unknown little runt of a mare under such circumstances against such horses; and when her owner, unable to obtain a trotting "skeleton," determined to "put her through" in a common road sulky, his conduct was looked upon as audacious in the extreme.

When the word "Go!" was given the five were all well together for a few seconds, when Whitehall, with a fine, bold stroke, drew out of the clump and took a commanding lead; the little bay mare, however, in the old road sulky, kept right on in his wake, making her long, low, sweeping strides with

the regularity of machinery, and threatening to pass him the first moment he should lose his feet. At the first quarter-pole there was but a length distance between them; at the half-mile but barely two, while the others, with the exception of Delaware Maid, who was pretty well up, were being trailed off in a most disastrous manner.

In this order the first heat was won by Whitehall; "the little bay mare," handicapped by the road sulky, whom no one thought would have a ghost of a chance in the race, being second; Delaware Maid, third, while Napolean and Hiram were distanced. The two latter being now out of the race, the little bay mare secured a trotting sulky for herself, and the record gives her the three successive heats, the time being 2.55, 2.52, and 2.49, and Delaware Maid being third in each heat.

The greatest excitement attended the finishing of the third and fourth heats, and when the race was finished the spectators advanced and felt the little heroine all over as they could not possibly comprehend how such a little homely scrub could stand the weight and fatigue she had been subjected to, and yet maintain the speed she did.

This was really her first exploit introducing her to the pages of the Racing Calendar, where she was recorded under the modest name of Flora. It was but little thought by those who placed after her name the mystical figures 2, 1, 1, 1, that she was destined to become the Queen of the trotting world and to render its tablets so illustrious.

Soon after the above race, "the little bay mare," or Flora Temple as we are now at liberty to call her, passed into the hands of John C., brother of George E. Perrin, for the modest sum of $575, which was more than seven times the sum for which she had been gladly parted with by her former Utica owner some three or four months previously.

Owing to an accident in her exercises, whereby the sulky hit her heels and caused a runaway, she was not on the turf at all during the season of 1851.

The following season, 1852, her owner, finding she had re-

gained her former confidence and steadiness, matched her against "Philadelphia Sall" for $200 around the "Red House" track. She won with great ease.

Her next race was with Dutchman at the Union course, mile heats, best three in five, for $250 a side, on November 10th. She won in three straight heats, thus placing herself indisputably "well up" among the best trotters of that day, by recording the time at 2.40, 2.39, and 2.36.

In the spring of 1853 she was placed in the hands of that Napoleon of the trotting sulky and one of the best conditioners and trainers of his day, Hiram Woodruff; who, after handling her more or less during the season, and becoming thoroughly convinced that she was a weight puller as well as a fast and stout trotter, matched her in December of that year for $500 a side, to trot, mile heats, best three in five, with Centerville, to wagons of 250 lbs.

As the mare had been let up in the season's training and had had no fast work for several weeks, the horse talent considered it a rash act in Hiram to make the race under the circumstances; and his friends endeavored to dissuade him from starting the mare in the race, the betting being 100 to 70 on the horse at the start; but no one knew the race qualities and stamina of that little mare better than Hiram and he drove her himself in this race. The first heat was a good, but not a sensationally fast, one, but Flora being an easy winner the betting was changed from 100 to 70 on the horse to 100 to 60 on the mare, and she won the second and third heats with great ease; the time of the three heats were 2.42, 2.46, and 2.44.

Considering the time of the year, the condition of the track, and the fact that she was not really in training, this was a performance of uncommon significance, adding vastly to Flora's value.

Soon after this great performance she was sold to a Mr. Boerum of Williamsburg,—with her engagement to trot Young Dutchman for $1,000. Her price was $4,000.

She had been, as before related, sold to John C. Perrin by

his brother George, the previous spring for $575. This shows that the winning of a great race often adds immensely to the value of a horse for racing purposes.

In 1853 her first race was with Black Douglas — a young horse of great private reputation — mile heats in harness, best three in five, on the Huntington course, April 28th. The mare was then too fat and soft for racing and lacked the required seasoning; the result of which was that the horse beat her in three straight heats in 2.35½, 2.30½, and 2.35. This was a great performance for a green horse of that period; but the little mare was forthwith matched to try titles with him again on the 17th of the next month.

Her next race was on the 4th of May with Lady Brooks, a good mare, and held in such high esteem by her friends and admirers, who boasted so much of her speed and staying qualities that 100 to 60 was laid against Flora. This race was trotted on the Centerville course for $1,000 a side. Flora won the race in three straight heats in 2.31¼, 2.32, and 2.33¼. They were all won with great ease and plenty of speed in reserve.

Flora was now eight years old. She was sound and of good constitution; she was a capital feeder, and all the time she was improving. Consequently, on her next meeting with Black Douglas, on the 17th of this month, and when driven by "Old Hiram" himself, Douglas was of no comparative account to her, and she won the race in three straight heats in 2.32½, 2.35, and 2.31¼.

Flora's next race was with Highland Maid, an exceedingly well-bred mare of her time, being by Sultrum, by Kentucky Whip, out of a gray Messenger mare, and her dam was also of Messenger blood, consequently she was an in-bred Messenger.

This race was trotted on the Centerville course, June 15, 1853, in harness and to wagons. The owner of the Maid, Mr. Nodine, drove her in this race, and Hiram Woodruff piloted Flora. Much interest was centered upon the race, and much money was staked, as it was said by the knowing ones that Highland Maid was possessed of much greater speed than she

had ever shown in public. It was afterwards reported that in her preparations for this race she made a trial mile in 2.18.

The day was a beautiful, balmy one in June, of just the right temperature for pleasure and comfort; the crowd at the track was immense, perhaps the largest ever before assembled there.

Highland Maid took the first heat in 2.29, the second in 2.27, and was distanced by Flora in the third heat.

Flora's next race was a wagon race with this same mare, Highland Maid. It took place on the Centerville course on June 28th. George Spicer drove the Maid, and Hiram Woodruff drove Flora. Hiram was much pleased with Flora that day, as she had already demonstrated her ability to "train on" and become better and better for racing as the season advanced and as she became better seasoned and toughened by much hard work. This great reinsman felt confident, on that June morning, that he was "up" behind one of the best bottomed, resolute, gamy, and altogether best little mares in the world to rely upon, and, consequently, he determined to force the pace.

Flora won the first heat in 2.28, thus breaking the previous wagon record of 2.31, and this was considered a most marvelous performance at that time. In the second heat of this race Flora broke and lost the heat in 2.32. The third was a dead but very exciting heat in 2.32. Flora also broke in the fourth heat, and lost it in 2.33. The fifth heat was an old-fashioned horse race, being trotted from end to end without a break or skip by either, Flora winning by a neck in 2.31½. In the sixth and deciding heat of this great race Flora had it almost all her own way, winning the heat and the race in 2.35.

This race did not seem to have much effect on Flora, for two days after it she beat Black Douglas easily in 2.32, 2.32, and 2.36.

After the great wagon race of June 28, 1853, Flora was the acknowledged queen of the trotting turf in that way of going.

Soon after Flora had defeated Highland Maid and Black

Douglas, she was matched against Taconey, mile heats, three in five in harness, the race to come off on July 14th over the Union course.

Taconey was a roan gelding bred in Canada; he already had a trotting record, under the saddle, of 2.25½, consequently this match created much excitement and the betting ran high, and it was about even. Flora had not made so fast time as had Taconey, but her record of 2.28 to wagon was considered as good as 2.25½ under saddle, and, besides, the game and bottom exhibited by Flora in her great race of desperate heats with Highland Maid, and then her contest with Black Douglas only two days after, had inspired her friends and admirers with great confidence in her ability.

On this occasion, however, her opponent won in three straight heats. The first, after a desperate struggle, was won by a neck in 2.28, the second by a head only in 2.27, and the third by a throatlatch in 2.29. The attendance at the course was large and the spectators were treated to a race affording great excitement.

Before the day was over these horses were again matched to trot two-mile heats in harness in five days. Flora won the race easily in two heats — 5.51 and 5.01. This was the best two-mile time that had then been made.

Flora engaged in several other races that season, the last one being on October 15th, when at Philadelphia she tried titles with the Morgan mares, Green Mountain Maid and Lady Vernon, mile heats, three in five in harness, for a purse of $1,000. This Green Mountain Maid was considered one of the greatest opponents Flora had ever before met. She had already beaten several of the best trotters then on the American turf; but the race resulted in a victory for Flora, winning easily in three straight heats in 2.33, 2.33½, and 2.33¼.

Flora trotted, altogether, twenty-one races in 1853, winning seventeen of them. She also beat all the horses that beat her, and beat them more times than they defeated her. In 1854 she was purchased by D. L. Pettee of New York city, and who

at that time owned Lady Brooks, and these mares he drove at Newport the season of 1854, at that celebrated sea-side resort.

Late in the season Flora was matched against the brown gelding, Mac, for $1,000, mile heats, three in five, in harness. Mac was a Maine bred horse, a descendant of Maine Messenger, and was considered at that time as good as the best. But on the 5th of October Flora beat him with ease in three straight heats. On the 18th of the same month, October, 1854, Flora trotted a match for $2,000, mile heats, three in five, in harness, against Jack Waters, a bay gelding by Old Abdallah. This race was on the Centerville course, Flora winning with ease.

Flora Temple was then purchased by James McMann. Her first appearance as the property of her new owner was at the Union course on May 7, 1855, in a match for $2,000, mile heats, three in five, against the famous mare, Sontag. It was to wagons and drivers of 300 pounds.

Sontag was a gray mare by Harris's Hambletonian. Sontag won the race in three straight heats, best time 2.31. Flora was next matched to trot twenty miles in an hour to a wagon for $5,000. The only horse that had ever accomplished this feat at all was Trustee, and his performance was in harness; consequently, this was considered at the time by the best judges a foolhardy match for her; and it proved to be, for she lost it.

Flora's next race was at Boston, Mass., over the Cambridge course against the black gelding Lancet — a son of Vermont Black Hawk — for a match of $3,000, mile heats in harness. She beat him in two heats. This was June 26, 1855. On July 6th she trotted a race in two-mile heats to wagon with Sontag for $2,000. In this race she was driven by Hiram Woodruff, and won easily in two heats; time, 5.07, 5.07.

Flora's next race was against Lady Franklin, a roan mare from Maine, two-mile heats, to wagons, for $2,000. This was over the Centerville course, September 11th; Flora won the race in two heats; best time, 5.11½.

Flora's last race of the season of 1855 took place over the

Centerville course on the 17th of October against Hero, the pacer, for $2,000, two-mile heats; she in harness, the pacer to wagon. Flora won in three heats; best time, 4.57.

The next two years were principally distinguished by her contests with Lancet, in which she took the lion's share of the prizes. She also defeated Taconey, Chicago Jack, Ethan Allen, and others, thereby reducing her record to 2.24½.

In 1858 she was sold to Wm. McDonald of Baltimore for $8,000, and during that year secured thirteen victories without a single defeat.

In 1859, October 15th, in a race against Honest Anse and Princess at Kalamazoo, Mich., Flora trotted a mile in 2.19¾, which created the most intense excitement among trotting turfmen all over the country.

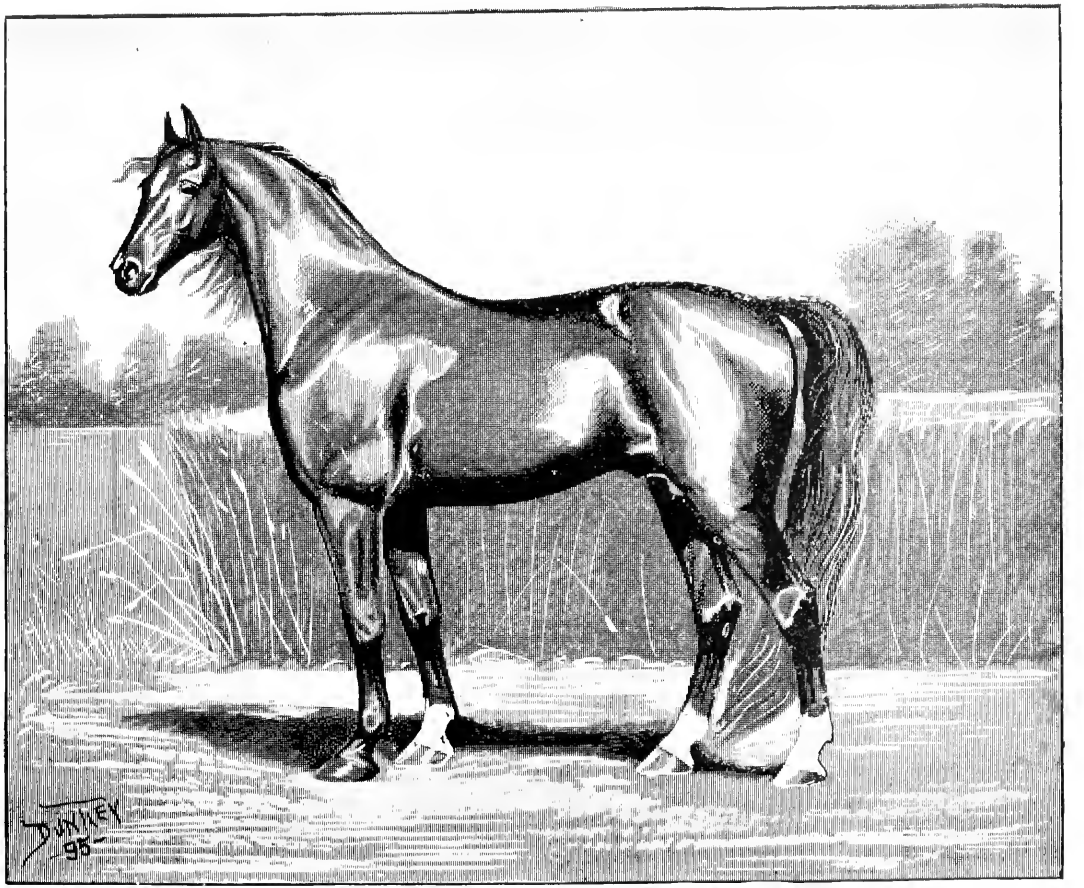
Flora's first race in 1860 was against the stallion George M. Patchen for $1,000, mile heats, three in five, in harness, over the Union course. Flora was the winner in the first heat by a throatlatch, in 2.21; the second in 2.24, and the third in 2.21½.

Hiram Woodruff remarked at the time that this was the best race that Flora had ever made. She also won in several other very important races during the season of 1860, without lowering her record.

In 1861 it was difficult for her to get engagements, but at length a new candidate, John Morgan, put in an appearance. Flora beat him in a mile race in 2.24½ and in a two-mile race in 4.52¼. This was Flora's last race. Her owner, Mr. McDonald, sympathizing with the Rebellion, she was confiscated by the government in 1861.

After the death of Mr. McDonald in 1864, she was purchased by Mr. Welch of Chestnut Hill of Penn., for $8,000.

The last time that Flora ever appeared in public was when Gen. Grant reviewed the great trotters on Dubois track in 1869. She showed well then, but afterwards, her hind legs failing, she was retired to the stud.



ETHAN ALLEN.

King of Morgan trotting stallions and the greatest campaigning stallion of the world.

CHAPTER XXIV.

OLD-TIME TROTTERS — *Continued.*

Ethan Allen — Color and description — Breeding — A natural-born trotter — Eighteen years on the trotting turf — His great race against Dexter in 1867 — Crowned King of the Morgans — Success in the stud — His death in 1876 — Ethan Allen in memoriam. Goldsmith Maid — Her breeding and pedigree — Sold at eight years for $350 — Sold in 1870 (when thirteen years old) for $35,000 — Her races in 1871 — In 1874 she lowered the trotting record of the world to 2.14 — Trotted in 2.14 at twenty years old — Retired to breeding stud in 1876 — Goldsmith Maid in memoriam.

ETHAN ALLEN.

ETHAN ALLEN, whose fame as a trotting stallion was co-extensive with that of the American trotting horse for a score of years, was a beautiful bay in color with three white feet and a small star and snip. He stood fifteen hands and a half inch in height and was one of the most beautiful fast trotting horses ever exhibited on the American turf.

He was foaled in 1849, the property of J. W. Holcomb of Ticonderoga, N. Y. He was sired by Black Hawk, son of Sherman Morgan, by Justin Morgan. His dam was a flea-bitten gray mare, a famous roadster bred in Vermont and sired by a Morgan horse called Robin and tracing to Justin Morgan.

Ethan Allen was a natural-born trotter, and trotted from his colthood up. His training for the turf commenced when but little more than a year old; and he appeared upon the trotting turf every year from two years to twenty years of age.

He was a most perfect horse and never required any of the artificial appliances so much in vogue at the present time, such as weights, boots, hobbles, etc. When young he was a remarkably handsome horse; high-headed and stylish, and when he

was twenty years old he would pass in general appearance for an eight-year old.

When three years old he made a record in harness of 2.36, and later he distanced George M. Patchen in 2.28, and was the first stallion in the known world to trot a mile in less than 2.30.

As a trotter in harness his fastest race record was 2.25½. But his greatest turf reputation was made by his trotting performance with running mate. His great race against Dexter on the Fashion course, L. I., June 21, 1867, driven by Dan Mace, when he trotted fairly and squarely without weight or boot, a mile in 2.15 — which record at that time had never before been equaled — caused a great sensation in the trotting world and crowned him, not only king of Morgans, but king of all trotting stallions up to that time.

In the stud he was quite successful as a sire of fast trotters; among his get were such noted flyers of their day as Billy Barr, 2.23¾; Hotspur, 2.24; Pocahontas, 2.26¾; Fanny Allen, 2.28¼; Fanny Lee, 2.29¼; Warwick, 2.29¼; Washington Irving, Honest Allen, the great Daniel Lambert, etc.

Ethan Allen was finally purchased by Sprague and Aikers for their "Kansas Stock Farm" near Lawrence, Kan., as a stock horse, and there he died on Sept. 10, 1876, in the twenty-eighth year of his age.

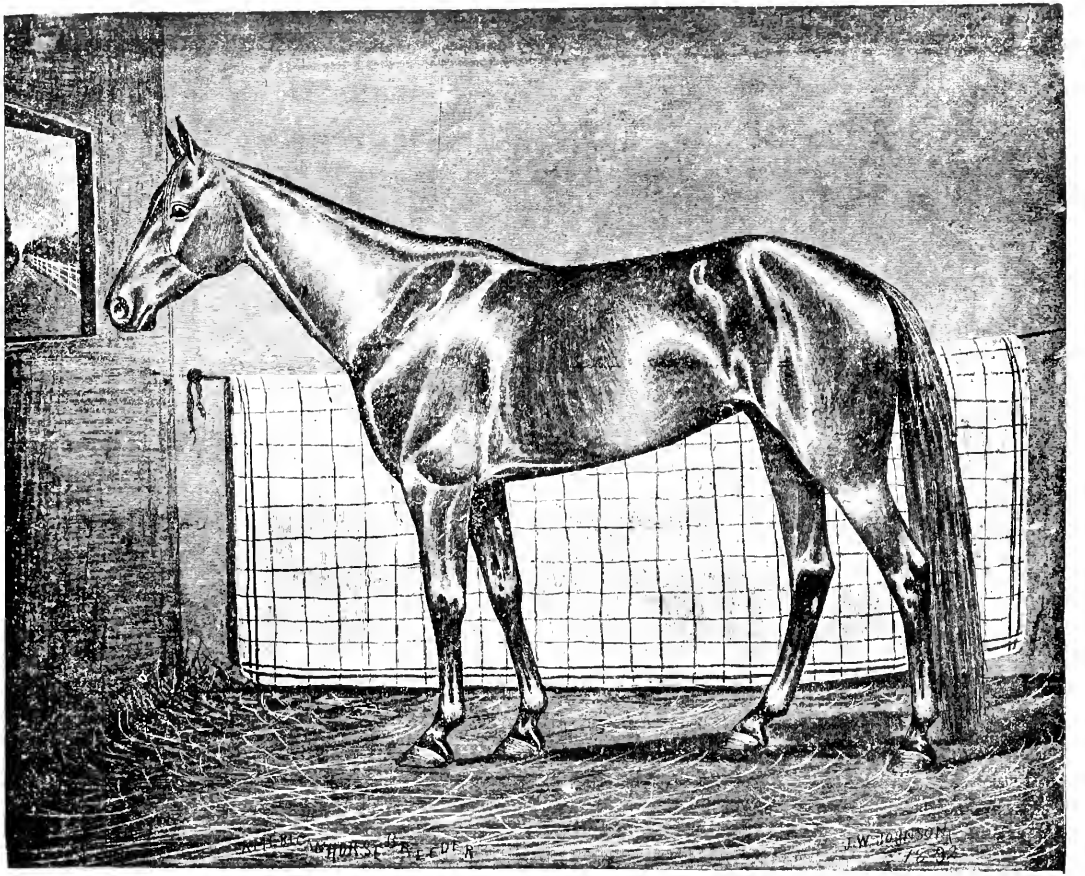
Having previously mentioned this noted horse in Morgan horses (Chapter VII) I will here add to what I have heretofore said, the following:

ETHAN ALLEN.

In memoriam.

On Ethan's grave, in Kansas soil,
The grass is growing green;
While Ethan's deeds to memory's call
Are fresh to all, I ween.

No other stallion of his day
Could with this horse compare,
For style and action all will say,
With speed and beauty rare.



GOLDSMITH MAID, 2.14.
The first to lower the record to 2.14.

King of Morgans, beautiful horse;
Admired and loved by all;
People's pet, and pride of the course,
He always had the call.

O beautiful Morgan stallion!
Perfection in thy day;
Still remembered by the million,
As hero in the fray.

GOLDSMITH MAID.

Goldsmith Maid was a bay mare fifteen and one-quarter hands high with no white markings. She was bred by John B. Decker of Sussex Co., N. J., near the New York State line, and foaled in May, 1857. She was sired by Alexander's Abdallah, when he was a two-year-old.

Her dam was called "Old Abb," and was sired by Old Abdallah by Mambrino, a son of Imported Messenger; this was the same horse that sired Rysdyk's Hambletonian, thus making the Maid an inbred Abdallah and a granddaughter of the "old rat-tail" (on side of dam), and a great granddaughter on the side of the sire.

She, like many of the Abdallahs, had rather an ungovernable disposition and was not broken to harness until some five years old; she was more than a handful for most drivers. When eight years old Mr. Decker sold her for $350, parting with her without regret. Her purchaser, soon tiring of a mare that he could not drive, soon bartered or "swapped" her off to Alden Goldsmith, who thought he detected signs of speed in her, for the equivalent of $750.

This gentleman gave her the name by which she was ever afterwards known, that of Goldsmith Maid. He at once set at the work of developing her speed, and in her eight-year-old form in 1865, she trotted her maiden race and won in three straight heats, getting a record of 2.36. With this race modestly began that career which afterwards caused the entire trotting world to hold up astonished hands.

In 1866 she trotted two races, winning both, and reducing

her record to 2.30. She won six victories in 1867 before passing into the hands of Budd Doble, who bought her, in company with Barney Jackson, in October, 1867, for the sum of $20,000, and he afterwards trained her and piloted her in nearly all her victories.

She was purchased in the spring of 1870 by Henry N. Smith of New York for $35,000, but who wisely left her in the hands of Doble, who, it is said, had become as closely identified with her as Alexander with Bucephalus or Dick Turpin with Black Bess.

Doble won one race with her in 1867 and she commenced the campaign of 1868 with a record of 2.28. That year she trotted twelve races, winning eight and being beaten twice by American Girl and once by George Palmer. A very memorable race of hers was won this year when she achieved a victory over Rhode Island, Silas Rich, American Girl, and others at Buffalo, on which event there was an immense amount of money staked and in which she lowered her record to 2.24¾, afterwards dropping it, during that season, to 2.22½.

In 1869 she was busy; she trotted eighteen races, only eight of which were victorious. American Girl and Lady Thorne each beat her five times. The little mare was now traveling only in the fastest company. August 12, 1869, she won at Buffalo against American Girl and George Palmer in 2.19¾ and 2.19½ and 2.19¾, thus placing her on record as winning the first three consecutive heats in a race ever won by one horse, and all under 2.20.

She emerged from the campaign of 1869 with the record of 2.19½. In 1870 she trotted twelve races and was only beaten once, by Lady Thorne. This year she gained the highest niche in the temple of trotting fame by scoring the fastest heat on record, 2.17. Dexter, with a record of 2.17¼, had held this honor since 1867; this the Maid eclipsed at Milwaukee, September 6, 1871.

This year she trotted fourteen races and was uniformly victorious, and fairly earned the crown accorded her as Queen

of the Trotting Turf. In 1872 she trotted eleven races, winning eight, and lowering her record to 2.16¾ at Boston. In 1873 she was distanced by Lucy in the first heat of her first race at Cleveland, owing to an accident, but she subsequently won ten races.

In 1874 her career was one of triumph, winning seventeen races and only losing two trials against time.

At East Saginaw, Mich., July 16th, she lowered her record to 2.16½ in a second heat and 2.16 in a third heat. At Buffalo, August 7th, it was further reduced to 2.15½; at Rochester, August 12th, to 2.14¾, and at Boston, September 2d, to 2.14. This record she held for many years as the fastest trotting record of the world.

In 1875 she only trotted six races, and was beaten once by Lula, daughter of Alexander's Norman, at Rochester, which was a memorable event, but she reversed the tables at Utica.

She was now eighteen years old, had earned immense amounts of money, and her owner decided to retire her from the turf, but changed his mind, and she made a most glorious campaign in 1876, the twentieth year of her life and the thirteenth year on the turf; again trotting in 2.14. Beaten once by Smuggler she beat him three times. At the close of the season this wonderful mare held the world's records as follows: The fastest heat, the fastest second heat, the fastest third heat, the fastest fifth heat, the fastest sixth heat, the fastest two consecutive, three consecutive, and four consecutive heats, and the fastest time on a half-mile track; and she had trotted fourteen heats in 2.15 and better.

She was then retired to the Fashion Stock Farm, belonging to her owner, Mr. Smith, near Trenton, N. J., in the fall of 1876, when in the twenty-first year of her age. She distinguished herself there as a brood mare and died in 1885, full of honors.

GOLDSMITH MAID.

In Memoriam.

"She has gone to her grave, but we ne'er can forget her,
The marvelous Maid with a mark of fourteen ;
In the ranks of the flyers we'll ne'er find a better,
For a gamer or faster there never was seen.

"As we think of the track and read its full story,
Her name and her fame shall have the first place ;
Her trots and her triumphs are hers, and its glory ;
She was Queen of the Turf and Queen of her race.

"Some may smile and say that others have beaten
The records she made in the fights that are past ;
But her's was no holiday battle, I reckon ;
They were genuine contests from first to the last.

"Yes, we'll say in remembrance, there ne'er was a better,
A faster or gamer there never was seen ;
She has left us forever, but we ne'er can forget her,
The marvelous Maid with a mark of fourteen."

From The Horseman.

CHAPTER XXV.

OLD-TIME TROTTERS. — *Continued.*

George M. Patchen — Foaled 1849 — Pedigree — Distanced by Ethan Allen in 1858 — Unfinished race with Flora Temple in 1859 — Defeated Ethan Allen in 1860 — His last race with Flora Temple — Sire of the campaigners George M. Patchen, Jr., and Lucy — Died in 1864 — George Wilkes, 2.22, founder of the Wilkes family — Pedigree — Raised by hand — First name Robert Fullingham — Defeated Ethan Allen in 1862, winning $10,000 — Defeated Lady Thorne in 1868 — Died in Kentucky in 1882, aged twenty-six years — Roll of honor.

GEORGE M. PATCHEN.

GEORGE M. PATCHEN, 2.23½, was foaled in 1849; bred by H. F. Sickles of Monmouth County, New Jersey. His sire was Cassius M. Clay, by Henry Clay, son of Andrew Jackson. His dam was a fine road mare by Head-em, a son of Imported Trustee. He was a powerful, brown horse, sixteen hands high, of great strength and much bone. He was coarse about the head, and, although he was what might be called a plain horse, his points — though uncommonly strong — were good, coupled with good trotting action.

He made his debut on the public trotting turf of the Union course, Long Island, October 28, 1858, to trot against Ethan Allen, but he was distanced by the little Morgan king in the first heat in 2.28.

In 1859, on May 9th, on the Union course, he defeated Pilot in 2.32¾. On June 21, 1859, on the same track, he fought out a desperate contest with Lady Woodruff and Brown Dick of six heats, in which the Lady conquered. But six days after, at the same place, he defeated both the Lady and Brown Dick, two-mile heats, in 5.01½, and the next day defeated the Lady again.

Over this same course, on July 7th, he defeated Brown Dick

and Miller's Damsel in 2.26¼, 2.26½, 2.28¾, and 2.29. Brown Dick took the third and fourth heats.

His next race was on October 17th, when, at the Eclipse course, he was defeated by Brown Dick, but three days afterwards Patchen distanced him in a second heat in 2.28. He then trotted two races each with Lancet and Brown Dick, winning one from each of them.

He then made bold to engage with Flora Temple (then at the zenith of her fame), at the Union course on November 21st. The mare won the first two heats in 2.28 and 2.23, with Patchen "close up" in each case. In the third heat, although Flora was the first under the wire in 2.24, the heat was given the stallion because of alleged unfairness and running of the mare. Darkness then coming on, the race was postponed and was never finished.

In 1860, May 16th, at the Union course, he defeated Ethan Allen in harness in 2.25, 2.24, and 2.29, and on the 23d, seven days after, he defeated him to wagons in 2.26¼, 2.27, and 2.31.

His race with Flora Temple drew the attention of the whole country to him. In his great race with her on June 6, 1860, he proved himself a remarkable trotter, and he trotted one of the quarters in a heat better than 34 seconds, and gave Flora Temple one of the best races and one of the most hard-fought races of her life.

His last race with Flora was at Corning, October 31, 1860. He was then retired to the stud, and died in 1864. He was the sire of several good and fast trotters in their day, among which was that great campaigner Lucy, 2.18½, and George M. Patchen, Jr., 2.27, etc.

GEORGE WILKES.

George Wilkes, founder of the great Wilkes family of American trotters, was a brown horse with one white hind foot. He was foaled in 1856, the property of Col. Felter of Greenwood Lake, Orange County, N. Y. His sire was Rysdyk's Hambletonian and his dam, Dolly Spanker — a celebrated road mare of her day whose speed was never developed on the turf.

She was an animal of great courage and wonderful endurance, and possessed natural speed enough to pull a wagon a 3.30 gait. She was undoubtedly a mare of good breeding, although her pedigree could never be established. She died foaling her first colt — George Wilkes — and he was at first a puny-looking little fellow. It seemed doubtful if he were worth the effort of raising by hand, but after a little stimulant in the shape of whisky weakened and sweetened, he gained strength enough to partake of a little cow's milk, and was brought up with that as his principal food.

Although quite small at birth he grew up to be a finely-shaped, compact, hardy animal, about fifteen hands high at the withers and somewhat higher behind, with a muscular development of loins, quarters, and gaskins that could not be surpassed, and which gave him a propelling power that enabled him to successfully compete with the best trotters of his day. When in his prime he was a good model of a horse, and as pure gaited a trotter as ever stepped on the track.

The development of his speed commenced at quite an early age. He won his first race at Fashion, L. I., August 1, 1861, where he trotted under the name of Robert Fullingham (by which he was known for several years during his turf career).

September 10, 1862, he defeated the renowned stallion, Ethan Allen, over the above course in straight heats; time, 2.24¾, 2.25¾, and 2.31, winning a purse of $10,000. June 2, 1863, he defeated Rockingham to harness over the Fashion course, and a week later beat the same horse to saddle; best time, 2.24.

At Philadelphia, October 10, 1863, he defeated Lancet, a son of Vermont Black Hawk, to harness, distancing him in the second heat, which was trotted in 2.24. This was the last race which he won under the name of Robert Fullingham.

Over the Union course, Long Island, October 26, 1865, he defeated Commodore Vanderbilt to harness, and November 6th of the same year he beat him again in a race to wagons. June 8, 1868, he beat the famous trotting mare, Lady Thorne, over

the same track in straight heats; best time, 2.25; and six days after beat her to wagons at the same place in straight heats; time, 2.27, 2.25, and 2.25¾.

During his trotting career he also beat the noted trotters, Rhode Island, 2.23½, Lucy, 2.18, and American Girl, 2.16½. His record, 2.22, was made in a race trotted at Narragansett Park, R. I., October 13, 1868, against Rhode Island and Duroc Prince.

Having had the honor of occupying a position in the judge's stand on this occasion, I know that his record at that time was by no means considered to be the limit of his speed. I was confident that had he "been sent" for all that was in him at the time, he could have lowered it some three or four seconds. During his trotting career he won twenty-seven races, getting $50,150 in purses. In all he won fifty-six heats in 2.30 or better. In the stud he imparted his natural trotting qualities and his own resolute will to his offspring to a degree seldom equaled by any other trotting sire.

And by so doing he placed himself at the head of the great Wilkes family of American trotters, which may be justly considered as among the leading speed-producing families of the world.

George Wilkes died in Kentucky in 1882, at the age of twenty-six years.

The following is a list of his sons and daughters, with their records, also the dams of the following trotters:

GEORGE WILKES, 519, SIRE OF

Harry Wilkes,	2.13¼	Tom Rogers,	2 20
Brignoli Wilkes,	2.14½	Albert France,	2.20¼
Guy Wilkes,	2 15¼	Lumps,	2.21
Wilson,	2.16¼	May Bird,	2.21
J. B. Richardson,	2.16¾	Ambassador,	2.21¼
So So,	2.17¼	Kentucky Wilkes,	2.21¼
Baron Wilkes,	2 18	Early Dawn,	2.21½
Rosa Wilkes,	2.18¼	Brown Wilkes,	2.21¾
Joe Bunker,	2.19¼	Gen. Wilkes,	2.21¾
Gambetta Wilkes,	2.19¼	King Wilkes,	2.22¼
Wilton,	2.19¼	Ellerslie Wilkes,	2.22½

Jimmy Temple (p. 2.23¼), 2.22½
Bob's Jug, ... 2.22¾
Lizzie Wilkes, . . . 2 22¾
Sister Wilkes, . . . 2.22¾
Alcantara, ... 2.23
Nelly L., ... 2.23¼
Prospect Maid, . . . 2.23¼
Magna Wilkes, . . . 2.23½
Sherman, ... 2 23½
Queen Wilkes, . . . 2.23¾
Favorite Wilkes, . . . 2.24½
Rowena, ... 2.24½
Wilkes Boy, . . . 2.24½
Blondine, ... 2.24¾
Madison Wilkes, . . . 2 24¾
Isaac, ... 2.25¼
Onward, ... 2.25¼
Favorita, ... 2 25½
Abbie, ... 2.26
Defender, ... 2.26
Fanny Wilkes, . . . 2.26¼
Georgiana, ... 2.26¼
Richard Wilkes, . . . 2 26¼
Mike Wilkes (p. 2.15¾), . 2.26½
Florence Elmore, . . 2.26¾
Alcyone, ... 2.27
St. Gothard, . . . 2.27
Tennessee Wilkes, . . 2.27
Howard, ... 2.27¼
Anglin, ... 2.27½
Cuba, ... 2.27¾
Ira Wilkes (p. 2.22¾), . 2.28
Simmins, ... 2 28¼
Willie Wilkes, . . . 2.28
Young Wilkes, . . . 2.28
Black Wilkes, . . . 2.28½
Kaiser, ... 2.28½
Mambrino Wilkes, . . 2.28¾
Miss Wilkes, . . . 2.29
Busby, ... 2.29¼
Empire Wilkes, . . . 2.29¼
Jeff Wilkes, . . . 2.29¼
The King, ... 2 29¼
Bonnie Wilkes, . . . 2.29½
Patchen Wilkes, . . . 2.29½
Sealskin Wilkes, . . . 2.29½
Carrie, ... 2.29¾
Alicia, ... 2.30

Daisy Wilkes, . . . 2.30
Kitty Wilkes, . . . 2 30
Bud Crooke, p , . . . 2.15½
Wilcox, p , ... 2.16¼
Flora Wilkes, p., . . 2.19½
Prophet Wilkes, p., . . 2 21½
Honesty, p., . . . 2.22
Pilot Wilkes, p., . . 2.23
Sir Wilkes, p , . . . 2.24¾
and dams of
Delmarch, ... 2.11½
Keeler, ... 2.13¼
Advertiser, ... 2.15¼
Waco, ... 2.16¼
Celaya, 3, ... 2.17¼
Blake, 3, ... 2.18¼
Frank Jones, . . . 2.19¼
Fugue, ... 2.19¼
Globard, ... 2.19¼
Butterfly, ... 2.19¾
All So, ... 2.20¼
Barclay, ... 2.20¼
El Banecia, ... 2.20½
Glenview Belle, . . . 2.20½
Ignis Fatuus, . . . 2.20½
Julia H., s. t. b., . . 2.20½
Pilgrim, ... 2.20¾
Eagle Bird, ... 2.21
Axminster, ... 2.21¾
Jubilant, ... 2.22
Fortuna, ... 2.22
Marea, ... 2.22
Orania, 3, ... 2.22
Wilksie G., ... 2.22¼
Ferguson Wilkes, . . 2.23
Wilkesbrino, . . . 2.23
Nettle Leaf, . . . 2.23¼
Silver Edge, . . . 2.23¼
Jacobin, ... 2.23½
Wilkeswood, . . . 2.23¾
Wardship, ... 2.23¾
Banquet, ... 2.24
Count Princeps, . . . 2.24
Noblesse, ... 2.24
Billy Thornhill, . . . 2.24½
Welbeck, 3, . . . 2.24½
Chatsworth, . . . 2.24¾
Woodboy, ... 2.25

Twinkle,	2 25¼	Rajah,	2.29¼
Daisy N.,	2 25½	Bonny Bon,	2.29¾
Pygmalion,	2.25½	Breadwinner,	2.29¾
Bon Bon,	2 26	Chastelard,	2.29¾
France,	2 26	Newcomb,	2 29¾
San Malo,	2.26¼	Clifton Boy,	2.30
Queen Wilkes,	2 26¼	Col. Young,	2 30
Bellerene,	2 26¾	Jack Dawson,	2 30
Decorah,	2 26¾	Pastoral,	2.30
Balzarine,	2 27	Manager, p.,	2.06¾
Kate Wilton,	2.27	Direction, p.,	2.10¼
Wilkesmont,	2 27	Galileo Rex, p.,	2.12¾
Tennyson,	2 27¼	Great Heart, p.,	2 13¼
Wild Olive,	2 27¾	Volula, p.,	2 15
Villiers, 3,	2 27¾	Wilkie Russell, p.,	2.15
Rectitude,	2.28	Nutpine, p.,	2.15¼
Kingmoor,	2.28¼	Anna Dickinson, p.,	2.15½
Reve So,	2 28¼	Satrap, p.,	2.19½
Adora,	2 28½	Bay Baron, p.,	2 19¾
Moonstone,	2.28½	LaClede, p.,	2.21¼
Wilkesview,	2.28½	Monte, p.,	2.23¼
A I B,	2 28¾	David Wilkes,	2.24
Bonnie Nutwood,	2 29¼	Vandal Wilkes, p.,	2.24
Castalia,	2 29¼	Wilkes Nutwood, p.,	2.24¾
George Willis,	2.29¼	Burlock, p.,	2.25

CHAPTER XXVI.

OLD TIME TROTTERS. — *Concluded.*

Dexter, place of breeding and pedigree — Recognized "king of the trotting turf" — Commenced turf career in 1864 and ended in 1867 — His great race with Ethan Allen — General Grant's ride after Dexter — Died in 1888 aged thirty years — American Girl — Birth and pedigree — Sold for $3,500 — A great race winner — Died in harness — Monument erected to her memory.

DEXTER.

IN April, 1858, at the farm of Jonathan Hawkins, in Orange county, N. J., the black mare Clara by Seeley's American Star, a rapid and gamy road mare, dropped to the cover of Hambletonian, a brown colt with four white feet and legs and a white face, which was, in due time, gelded, and at the age of four years was purchased by George B. Alley of New York city. He was then christened Dexter and placed in the hands of that veteran trainer, Hiram Woodruff, for development. His speed came to him quickly, and in a few years he was recognized as king of the trotting turf.

John Murphy rode him in his saddle race when he beat the 2.19¾ of Flora Temple, but Budd Doble drove him in nearly all of his memorable contests. The first time he met Goldsmith Maid was at Middletown in 1867, and he easily defeated her.

After this he beat her in faster time, as he also did such prominent performers as General Butler, George Wilkes, Lady Thorne, George M. Patchen, Jr Silas Rich, Tackey, and Bashaw, Jr.

He began his turf career in 1864 and ended it in 1867. In three years he had conquered the world and was retired for the reason that there were no more honors to be won.

His record of 2.17¼ was made at Buffalo, August 14, 1867, and Mr. Bonner bought him for $35,000.

If he had beaten Ethan Allen in his great race with him June 21st, the same season, then Mr. Bonner would have given $40,000 for him.

Although Dexter did not win this race when Ethan Allen trotted in 2.15 without a break, Commodore Vanderbilt and others timed him separately a mile in 2.16.

This 21st day of June, 1867, was a great day in the annals of the history of the American trotting turf, when Ethan Allen was crowned the king of trotting stallions. Among those who were on the track that day and applauded the effort of Dexter, but who are now gathered with the dead, are George B. Alley, Shepperd F. Knapp, Com. Vanderbilt, Wm. H. Vanderbilt, E. S. Sanford, Chas. J. Foster, Wm. M. Rysdyk, Thomas Martin, Alden Goldsmith, Capt. Rynders, George C. Hall, Com. Dodge, Lew. Potter, Peter Dubois, John Morrissey, Dan Mace, Dan Pfeiffer, and many others.

The white-legged king lingered on the stage long after many of his admirers had stepped from it.

General Grant and Henry Ward Beecher each enjoyed a ride behind him after he had passed into the stables of Mr. Bonner.

If horses have a hereafter, and the proud spirit of Dexter crossed to the unseen shore after it left the worn tenement of clay, how royal must have been his welcome from those who were taught in earth's pilgrimage to extol pluck and prowess.

Just after his election to the presidency, but before his inauguration, General Grant rode out with Mr. Bonner. In passing through the park Dexter was startled by a man trimming trees, and the jump he made frightened the stolid soldier of the Wilderness more, for the moment, than he had ever been frightened by the roar of battle. On the way back to the stable Mr. Bonner handed General Grant the lines, and the old soldier-horseman was delighted with the resolute action of the trotting king. Ehringer's famous picture "Taking the Reins" was based upon this incident, and every figure in it is a portrait.

For some time it was quite the fashion for distinguished men visiting the city of New York to seek the opportunity of riding behind this world-renowned gelding; and for a time he was, undoubtedly, the best known horse that ever lived.

Dexter became quite cranky in his old age, and for years before his death he seemed to delight in frightening the timid who called upon him in his box. He would come at them with ears laid back and mouth wide open, but if one stood his ground he was soon all right again. He was just thirty years old when he died, April 21, 1888.

AMERICAN GIRL.

American Girl, 2.16½, was a bay mare foaled in 1862, bred by Philip Travis of Peekskill, N. Y. Her sire was Cassius M. Clay, Jr., and her dam a sorrel mare about fifteen and one-half hands high with one hind foot of a conspicuous white and a stripe in her face of the same color. This dam had a clean cut expression indicating intelligence, and her general make-up indicated her to be a thoroughbred or closely allied to that breed; and it was generally believed at Dansville, Va., where she was raised and owned until near the time of the breaking out of the civil war, that she was an immediate descendant of Old Boston.

This mare had run several races at Dansville previous to coming north, and was held in high esteem by her owner, Wright Travis, who, being a northern man, was, on account of his political views, most emphatically requested by a special committee to vacate that section of the country. So, as the climate of Virginia was getting altogether too hot for him, he concluded to accept the invitation to "move on" without much parley or delay; consequently he with his family and some personal effects, it is said, became a "mover." He went toward the north pole drawn by a sorrel mare with her sorrel mate and a bay gelding as a spare horse; his destination was his old home at Peekskill on the Hudson, N. Y.

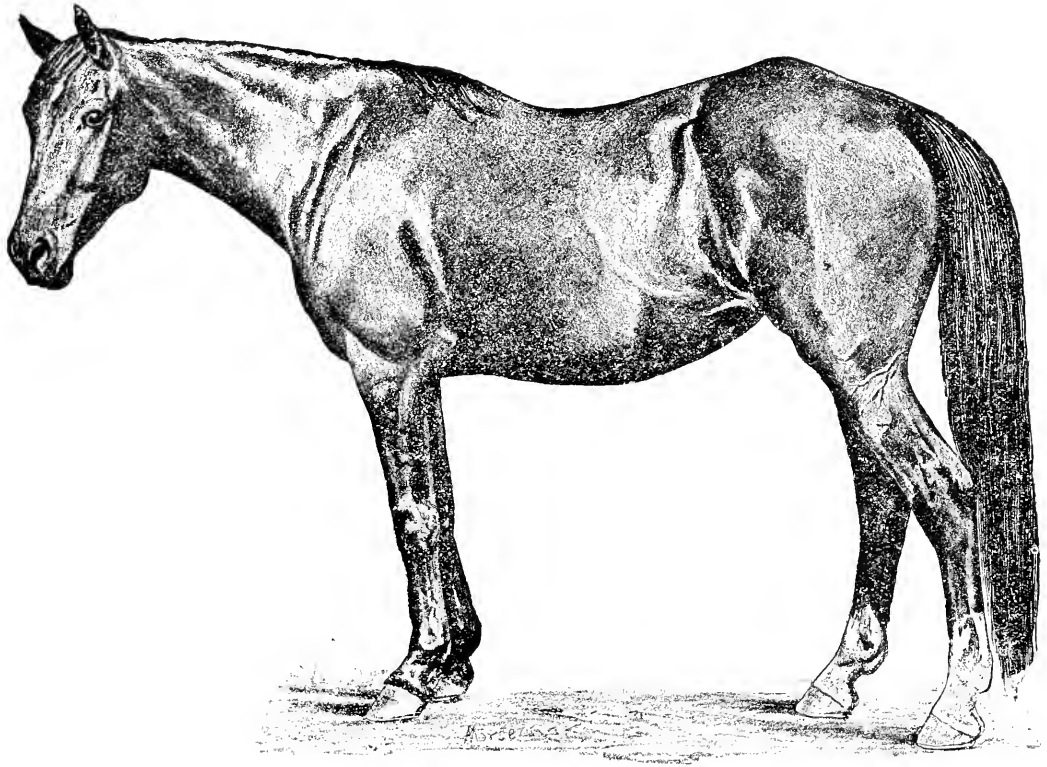
When Philadelphia was reached, the funds becoming low,

the bay horse was sold to help pay the expenses of the journey, which was then continued with the two sorrel mares. On his arrival at the old homestead Wright Travis needed money, and so to his stay-at-home, well-to-do brother Philip he sold this mare, under consideration. Philip owned and occupied a large farm near by and concluded to raise a colt from this Virginia mare so highly esteemed by his brother Wright, so he sent her across the Hudson to be bred to the horse before mentioned,—Cassius M. Clay. The result of this was that in May, 1862, she dropped the worst-looking, crooked-legged filly that ever was foaled in that vicinity; at least as far back as the memory of "the oldest inhabitant" went.

She was so loose-jointed, weak-gaited, and queer that in her foalhood she was valued by her owner (at weaning time) at $10, although good horses were in demand at that time at very good prices.

About this time Philip's son, Eugene, enlisted for three years in the cavalry service commanded by General Kilpatrick; when he returned home, after these three years had expired, he found that the big, awkward filly of three years was the "boss of the ranch," and utterly refused to be ridden or driven. His father told him that if he would break her he could have a half interest in her; he accepted the offer, and, being a cavalry man, quietly went to work to break her under the saddle. After a hard struggle he finally succeeded in doing this. At this rate of going she could trot a 2.45 gait after a few weeks' handling. After this she was hitched up with the best horse in the neighborhood and could beat her companion quite easily. Then she was matched to go under the saddle in a race against the Odel gray mare to a sulky; the big, green filly captured the race quite easily.

After this she was sold to Cyrus Travis and Henry Odel,—the owner of the gray mare,—for $1,500. They sold her that fall to Henry Mason, Morris Dykeman, John Carey, and Philip O'Brien for $3,500. When put in training by these parties she soon became the Queen of the Hudson, and her



GREEN MOUNTAIN MAID.

The greatest trotting brood mare of the world, dam of Electioneer.

reputation reaching the ear of that noted sportsman, William Lovell, he bought her for $7,000.

After this she came into competition with such racers and campaigners as Goldsmith Maid, Lady Thorne, and Lucy, and was among the first to lower the colors of the then great Occident in his own state. She won for her owner, in many races, thousands of dollars, and finally died in the harness on the race track at Elmira, N. Y., where a monument to her memory has been erected at a cost of thousands of dollars.

It has been said of her that a more honest race-mare never entered a trotting race.

CHAPTER XXVII.

THE FIVE GREAT TROTTING BROOD MARES OF THE WORLD.

Green Mountain Maid — Dam of nine in 2 30 list — Two in 2.20 — Also one with a record of 2 20¾ — Dam of the great Electioneer with 155 trotters in the list — Her pedigree — Beautiful Bells' pedigree — Dam of seven in 2 30 list — Dam of sixteen foals — Miss Russell, pedigree — Dam of nineteen foals — Dam of Maud S., 2 08¾, etc — Canadian blood mixed with thoroughbred in pedigree — Dolly, pedigree — Dam of three great sires — Dam of Czarina — Object lesson for breeders — Alma Mater — Pedigree — Dam of eight 2.30 trotters — Dam of Alcantara — A positive breeder.

THE five greatest trotting brood mares of the world are as follows:

GREEN MOUNTAIN MAID, holding precedence over all others by virtue of being the dam of nine in the 2.30 list, two of which have trotted in 2.20, while another has a record of 2.20¾. She has, with justice, been denominated as "the great mother of trotters."

Her life was a long one and was mostly spent in the paddocks of Stony Ford; and in the long list of her foals there are but two who were not sired by Messenger Duroc. These were her first two, and were the bay mare Storm, 2.16¾, by Middletown, foaled in 1867; and the bay horse Electioneer, foaled in 1868, sired by Rysdyk's Hambletonian. The latter never appeared in public on the turf, and is not reckoned as one of the nine of his dam's produce in the 2.30 list; but in fame his name outweighs all of theirs both individually and collectively.

Green Mountain Maid was sired by Harry Clay, son of Cassius M. Clay, Jr., (20–) a lineal descendant of Imported Belfounder, and her dam was a most excellent sorrel mare with four white legs and stripe in her face, who was bred by Goldsmith Coffin of Red Lion, Ohio, and sired by Iron's Cadmus by

Beach's Cadmus — a thoroughbred son of American Eclipse, son of Duroc by Imported Diomed. Duroc's dam was by Imported Messenger; this mare, Shanghai Mary, was half-sister to the old-time pacing mare Pocahontas, 2.17½, which she very much resembled, being marked exactly like her and partaking of the color and markings of her sire, Iron's Cadmus.

The converted pacing stallion, Smuggler, with a trotting record of 2.15¼ (which was the world's trotting stallion record for several years), was a grandson of this same horse, Iron's Cadmus. Consequently, when we take into consideration the facts in reference to this "great mother in Israel" carrying in her veins the blood of the old-time celebrated Fireaways of England (through imported Belfounder), the blood of imported Messenger (through his grandson, Duroc), the blood of imported Diomed (through his son Duroc and his grandson, American Eclipse), then we cannot for a moment dispute her legitimate right to have been a fast and gamy trotter herself — had she been trained for that purpose; or her ability to produce sensational or uniform speed, and her ability to breed on in the speed lines, through generations yet unborn. (See the Electioneers, Chapter X.)

BEAUTIFUL BELLS.

Beautiful Bells, 2.29½, was a bay mare by the Moor, her dam being Minnehaha, by Bald Chief (Stevens), dam Nettie Clay, by C. M. Clay, Jr. (22), son of Cassius M. Clay by old Henry Clay.

This mare is the dam of fifteen foals, seven of which have records from 2.12¾ to 2.30¾, with three to be heard from, and she is again in foal. Six of the nine foals with records are by Electioneer.

MISS RUSSELL.

Miss Russell, a gray mare by Pilot, Jr., whose dam was Sally Russell by Boston. She is the dam of nineteen foals, seven of which have records from 2.08¾ — in Maud S. — to 2.28 in Russia, by Harold, and own sister to Maud S., and dam of

the greatest of living trotting sires, Nutwood, with 134 performers in the 2.30 list.

In the pedigree of this great mare, we find the blending of the northern blood of the old-time Canadian with that of the great American race-horse, Boston; this latter horse being the greatest of his day, and the sire of the ever memorable Lexington.

DOLLY.

"Old Dolly" was a bay mare, foaled in 1861, sired by Mambrino Chief, dam Fanny by Ben Franklin — a non-standard horse of the copper-bottom stock. She was dam of the three great sires, Thorndale, 2.22¼, by Alexander's Abdallah; Onward, 2.25¼, by Geo. Wilkes; Director, 2.17, by Dictator and Czarina, 2.21, by Egbert.

It is through the great transmitting powers of her sons that old Dolly's memory is kept green.

In Dolly, the breeders of the American trotter are presented with an object lesson demonstrating the satisfactory results of the breeding of the daughters of Mambrino Chief to the sons of Hambletonian.

ALMA MATER.

This cherishing mother was a chestnut mare foaled in 1872 and sired by Mambrino Patchen, dam Estella, — thoroughbred daughter of imported Australian. She is the dam of eight with records from 2.19½ to 2.30, and includes the great Alcantara with eighty-two in the list. This mare threw trotters to six different stallions, thus proving herself a positive breeder.

CHAPTER XXVIII.

BREAKING AND TRAINING COLTS.

Educate *vs.* breaking — First lesson — Bitting — Teach "*whoa*" — Short lessons — Reward good behavior — Hitching double — Patience required — Kicking — Shying — Confidence — Training for draft — Train in line.

I HAVE, some time since, come to the conclusion that you do not want to "break" your colts; you simply want to educate and train them. The best age to commence this is as soon as the foal gets up and sucks the dam, or as soon after as you can get time to attend to it.

The first lesson to teach a young colt is that you do not wish to hurt him. The next that you are a stronger party and can master him. He will soon learn these two lessons and then you can go up to him anywhere, and when once you have your hand on him you can easily hold him and he will not struggle to get away from you.

The next two lessons are to halter and lead him and teach him to stand tied by the halter. You may then, by kindness, teach him to follow you around and come at your call, by always awarding him for so doing with a sweet apple, a handful of oats, or anything else as such youngsters are known to like. Then teach him at an early age to be handled all over, including the taking up of his feet, and to be curried and brushed. When he finds that you do not hurt him he will like these lessons and will always remember them.

Next, accustom him to stand with a bag or blanket thrown over him. When you have taught him all of these, he is ready, as soon as old enough and large enough, to be bridled and bitted. In bitting, put a bitting rig or single harness on him with an open bridle; check him up rather loosely at first and turn into a small paddock or yard. Do not compel your

colt to wear the bitting gear too long at one time, as by so doing it has a tendency to sour his disposition. Keep him in the gear just long enough each time to give him to understand that he cannot get clear of it and that he must give up to it; and do not take it off while he is struggling to free himself from it, but let him fight it out and get quiet first. Always take it off when quiet, otherwise he may think the removal has been caused by his exertions to get rid of it.

When he has become somewhat accustomed to the bit and has given up fighting it, start him up a little; always use the same expression, as "go on," "get up," or whatever term you choose to use for starting him. Practice in this way for a little while until he learns to start and stop at the proper command. Then take a buggy whip, crack it or touch him lightly on the rump, when starting him up. Teach him the word "whoa" and "back"; when he thoroughly understands all of this and the use of the whip, put the lines on him, running them back through the shaft tugs instead of the territ rings, to prevent his turning around, and thus teach him all about driving, starting, stopping, and turning.

Make all these lessons short, and by frequent repetitions impress each point upon his mind. Be kind and considerate at all times, remembering that he is usually willing to do what is required of him if he understands you. Do not scold or swear at him. After each short lesson, give an apple or lump of sugar, or some delicacy of which he may be fond, as a reward for good behavior; it is surprising to see how soon he will learn to appreciate such awards or favors. Be sure you bit him thoroughly and practice this for some time before attempting to drive in harness on the road. If the colt has always been petted and treated kindly, as he should be, and has no fear of man, there will be but little trouble.

The fall after your colt is one year old, if well cared for and well grown, it will do to commence driving him in a light rig. My own method is to drive first double beside a quiet horse, in order to get him accustomed to the road and to sights

he may meet on the road and to give him confidence in himself.

In hitching up a colt double I always put him on the off or right-hand side at first, as then in meeting high loads and other scarey things on the road he is further from them, and what gives him more confidence and less fear, there is another horse between him and them. Another strong argument for thus placing him on this side is that in getting in or out on the near side you are less liable to frighten him, especially so if, by chance, you should happen to slip or stumble.

Many a fine, highly-bred colt, for want of confidence in himself becomes frightened on the road from meeting strange and, to him, frightful things, and will try to run away from them; but if balked in this, his next means of defense or protection is to kick, which is one of the worst habits that a colt can possibly get into. Many a kicking horse first commenced the habit from fright, and not from viciousness, as many suppose. If a colt is taught what is required of him, as soon as he is made to understand, he usually becomes a willing subject; but to attempt to force him to do that which he does not comprehend is to excite him to resistance; hence the many balky, kicking, and unruly horses.

Yet it gives me great pleasure to know that by judicious breeding and handling, as has been practiced for the last two or three decades, we have far less of this class of horses than we had thirty years ago.

In breaking and training colts strength is not as essential as patience, perseverance, and kindness. Kindness and gentle handling are the means by which a colt's confidence is gained, and this should be practiced from the beginning. While you should always treat the colt kindly, you should never play or fool with him, as many horses have been taught to be vicious in later life from having been fooled with as foals; consequently, any attempt on the part of the animal towards undue familiarity should be checked at once, or the time may come

when it will find out its power, which may lead to serious results.

Colts contract habits very easily when improperly managed, and when a bad habit in a horse, as well as in a man, is once established, it becomes somewhat of a serious matter to eradicate it. I do not trust a colt too much when commencing to drive singly, and recommend the kicking strap at first until full confidence is gained over the colt. When you know that he will not kick under any ordinary circumstances you may with safety leave it off. My advice is not to place too much confidence in a young colt on the road, but be very watchful and careful until you are quite sure you have a safe animal.

Next to kicking perhaps shying is the greatest evil to which horseflesh is heir. The inconvenience, annoyance, and ofttimes danger occasioned by a shying horse is anything but pleasant to its rider or driver. Shying in horses is undoubtedly the offspring of fear. Fear is the emotion excited by suspicion, apprehension, appearance, or approach of danger. This may be termed natural timidity, giving rise to that kind of shyness with which colts and young animals are endowed. Another kind of shyness may be said to be acquired. To illustrate: A colt is naturally shy at any object of imposing appearance, novel or strange to him. On the other hand, he beholds an object that is familiar to him, which he associates with some former suffering. Shyness may also be attributed to a third cause — imperfect vision. A horse whose eyesight is imperfect is apt to shy at objects in consequence of not seeing them perfectly. The disposition to shy arising from either of the above causes is often increased by the acts of the driver. Our advice to the driver of such horses would be to keep your temper and save your whip. Gentleness and persuasion are by far the best means of breaking off this habit in your colt. Let the animal stand and look at the object he fears; speak to him encouragingly, and gradually he will approach it. After he has passed it turn him around, passing the object several times

slowly, allowing him to feel of it with his lip or smell of it, if practicable for him to do so, and this fear vanishes.

By thus gently managing him he soon places confidence in you, and a gentle word from the driver will induce him to move on past the object. It is as essential for the high-bred road horse to have confidence in his driver as for the driver to have confidence in him.

Many who claim to be familiar with the business of breaking and training colts neither understand the nature of the colt nor the best method of subduing or training it. A blooded colt is a highly sensitive and intelligent animal, quick to learn, having memory of certain things equal to that of the human family, and with an intuitive knowledge that cannot be explained or understood. A coarse, rough man, knowing next to nothing of human nature, and still less of the nature of the horse, is no more fit to have the handling of colts than one whose education is acquired on the street and the saloon is fit to teach a district school, or the devil to preach Christianity.

From the first, insist that your colt walks fast, for in the majority of horses this is a most important gait. A bright, brisk walking gait will be of supreme importance in the horse of the future, and unless the colt is taught its worth it will never know it. Our horses, like our children, are largely what we make them by education; and if the colts are allowed to drag along with heads down and move in a snail-pace, careless manner while being educated, they will, in many cases, be inclined to continue it later on.

Style and beauty of motion do not always spring spontaneously, but are in many cases the result of careful, systematic training — breeding, of course, having its full share to do in this case.

As A is the first letter in our alphabet, so is "whoa" the first letter in the alphabet of the colt's education; teach him to properly understand that one word as being most essential of all words to be used in his education. Never allow a colt in

training to get the advantage of you. The old-fashioned way of breaking colts, as practiced when I was a boy, was something of this sort: A farmer has a colt that he thinks old enough and big enough to drive, and wishes to use him and desires him to be broken; consequently, he invites his neighbors to help harness and drive it. It is brought out, but, having had no previous handling, is excited, trembling in every nerve. Nothing is done to give the poor beast the least intimation as to what is wanted of him. Three or four stout men hold him by the head while as many more are trying to put on the harness; he is spoken to roughly; his ears are cuffed for shaking his head; the struggle continues until the colt is attached to a vehicle, and now the supreme moment has arrived, when, in spite of the combined efforts of all of these men, the colt rears and starts off, having things about his own way — leaving first the trainers and next the vehicle in his rear — and all exclaim: "That is a terrible colt to break."

A colt that would not resist such treatment would not be worth breaking. Before touching a large, strong, unhandled colt, have your plans formed and a knowledge of the general characteristics of the animal to be handled; he is fearful of being hurt and must be managed accordingly. As a general rule he will do what is wanted of him as soon as he learns what it is. Another essential thing to remember is that whatever impressions are made on the brain of the colt are almost as unerasable as though written on tablets of stone; hence the importance of making the right impressions — for, right or wrong, he will carry them for a lifetime.

In training a horse for draft purposes great care should be taken to avoid over-loading at first. In training a horse for draft purposes hitch to an empty wagon at first until he gets fully accustomed to handling that; then put a little, very little at first, load on, and gradually increase it until he becomes thoroughly acquainted with pulling heavy loads, and thus he will never know his full strength, but will consider himself duty-bound to pull all loads to which he may be hitched.

So of all other classes of horses; teach and train them to thoroughly understand that branch of business that will be expected of them. The training and education of the colt should be conducted on strictly business principles, inasmuch as an animal intended as a draft horse does not require a race-track education, neither does a race horse proper require to be taught to draw heavy loads.

In educating our sons for professional and business men we expect to have them taught "in line" of the business or profession decided upon at the outset. They do not need to acquire the blacksmith's trade in order to preach the gospel, nor the arts and trickery of trade to enable them to practice medicine. Yet the rudiments of their education should be the same, *viz.*, what is to be learned in our American common schools.

This species of education is applicable alike to all classes of men and to all professions. With the horse it is the same; the rudiments of his education as herein taught are alike applicable to all breeds and all classes of horses that are to be used in harness.

CHAPTER XXIX.

TRAINING FOR SPEED.

High-bred and high-mettled most easily educated — Where to give lessons — Early development of speed — Watch temper and disposition — Short brushes — Don't overwork — Skeleton wagons — The mouth — Pulling — The check.

"To those who catch the cadence
Of the rise and fall of sound,
There is music in the patter
Of the hoof upon the ground."

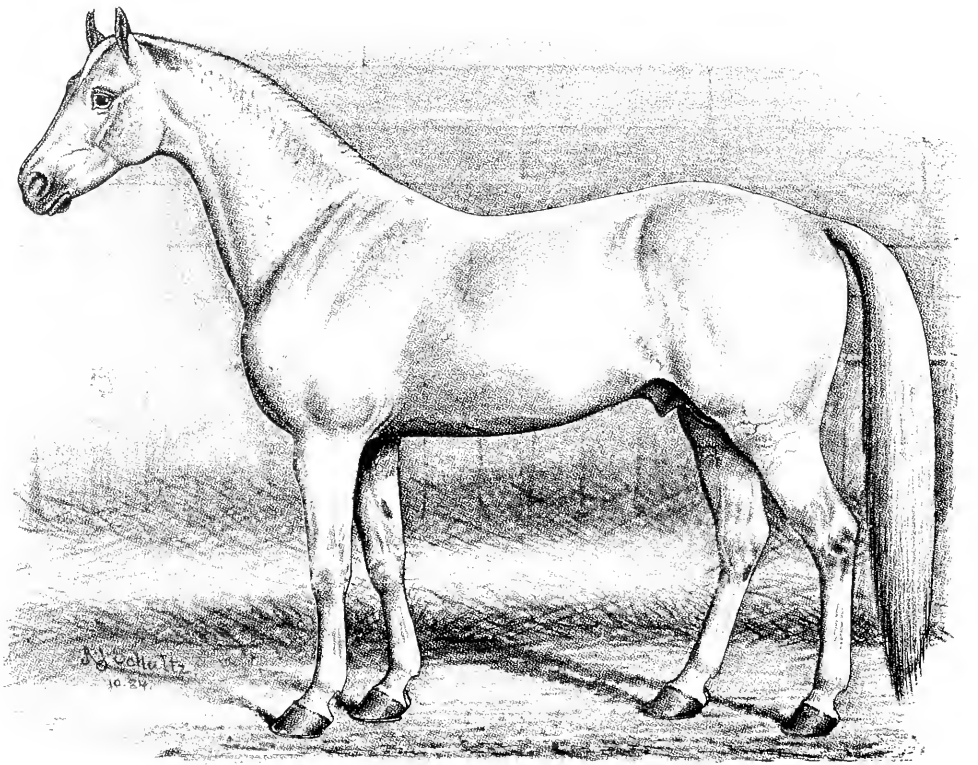
HORSES can be educated to the extent of their understanding as well as children, and can be as easily managed or ruined by bad management.

Horses of high mettle are more easily educated than those of less or dull spirits, and are, consequently, more susceptible to ill-training.

The training of the trotting horse should really be commenced from the time he is handled as a young colt, and whatever encourages his tendency to make the trot his best way of going should be a part of his training; and therefore the "natural to trot" should be improved from the very first. After the colt is thoroughly broken to drive singly he is ready to receive his first lesson in trotting.

Such lessons may be given him on the track, street, or road, where smooth and level; the track is by far the best place, it being more level, and usually much safer than either the road or street; yet a good road will answer when a track is not conveniently accessible.

I would never advise the training of a colt for the race course before it is two years old, and it then should be handled steadily and carefully by a trainer of judgment, for however well they may have been kept from birth, and however well



BAYARD.

The best son of Pilot, Jr., and sire of Kitty Bayard, 2 12½.

grown they may be, it should be borne in mind that their bones and muscles are soft and insufficient to bear the strain of the same work given to those of more mature age.

The question as to whether the early development of trotting horses will have a tendency to impair their endurance in point of time, is one of great interest and importance.

What I mean by early development in this case is of colts not less than two or three years old, and not yearlings, for reasons above given; for in many cases which have come under my observation, young things — mere babies — have been overworked, and when they begin to hitch and hobble, a good rest and let up would do more to restore the stroke than anything else.

A colt will not attain his greatest excellence at three years old, or at five either, if such excellence is to be very great or lasting. There is nothing in nature that comes to maturity early and lasts long; early maturity means early decay in nineteen cases out of twenty.

The temper and disposition of the prospective trotting colt should be carefully watched, lest, by overwork, he becomes cranky and careless as to pleasing his trainer or driver.

Great care should be taken not to make his brushes of speed too long, but alternate them with jogging and walking. Never speed him more than thirty rods at first, perhaps less, all to be governed by the circumstances of the case. Age, condition, size, etc., of the colt is to be considered.

Speed is acquired by fast and frequent brushes; it is better to underwork than to overwork the colt at first; two short lessons are better than one long one. From two to four miles is usually a sufficient "work out" for a young beginner.

Measure off and work him eighths until he can trot them fast before driving him fast for a quarter, much less a half-mile, as is frequently done to his detriment. If he cannot trot an eighth fast, he surely cannot trot a fast mile.

Any green horse should be worked for speed on the same

plan as the young colt, but his work outs may be longer, say six miles.

By working the colt on this plan he never becomes distressed for breath and never becomes tired or sore. When you find the speed of a colt for one-eighth of a mile satisfactory, gradually increase the distance to a quarter; then when he has performed that distance to your satisfaction another eighth may be added, and so on, gradually, until a mile is reached; but do not forget to be slow and gradual; learn to labor and to wait.

Always endeavor to teach your colt to *finish* fast, whatever the distance may be, as this is a very important item in a race, as the money lies in the last length to the wire.

Watch your colt and do not overwork it; as soon as he shows signs of being restive or sluggish let him up a little. Watch for these symptoms carefully, for this is a critical time; if you overdo him much now it will be some time before he is himself again.

The work must be according to his constitution, to the rate of his growth, and to his heartiness of feeding. He should be carefully watched to ascertain whether he improves or not.

When a trotting colt often breaks his gait in his exercise, it is an indication that he has had too much work for his age, and has got or is getting sore on it.

Don't waste any time in teaching a young colt to "break and catch." Remember you are teaching him to trot and not to "go as you please" in his races. He should be taught, if possible, not to break at all. In case he does break, do not jerk, snatch, or see-saw on the bit, but give him a square pull back and swing him very slightly to one side, giving him a chance to catch in the "cross stride."

It is seldom necessary to use a whip in training a nervous, highly-bred colt, or in driving such colts or horses in their races.

After speeding him for the day loose his check and continue walking, as a rule, until cooled off.

Never, in training, take a colt, foaming with sweat, to his stall, but cool out in walking.

Experienced trainers, Marvin included, prefer a skeleton wagon to a cart or sulky for jogging young trotters.

Our greatest and fastest trotters never reach their best speed until they have undergone a good deal of handling and training.

Always have a light but firm hold on the reins. In all his work the colt should be taught to go alone without being pulled hard. His mouth may be spoiled for life by allowing him to tug on the bit now, and he is not as likely to make a fast trotter if he is allowed to have his weight upon the driver's arms.

While there have been fast trotters and stayers that were hard pullers, there is no doubt they would have been better horses but for that fact; still it will be remembered when going fast the horse or colt will often require to feel the bit quite sensibly, and that he cannot do his best without it; and the driver should support him in his fast work with as little pull as possible.

The horse with a good mouth will always feel the driver's hand, and if the driver thoroughly understands his business of handling a first-rate fast trotter he can play upon the reins equal to a harper upon the strings of his instrument, and the horse will answer every touch with the music of his feet.

The producing and the maintaining of a good mouth on the trotting horse is of the utmost importance and one of the most essential points in his education.

When pulling has become a vice and his mouth has become so calloused that he pulls a sulky and driver along by the reins instead of by the traces, he loses a great deal of the power needed when the struggle for supremacy in the race comes.

It must not be forgotten, however, that a great many trotting horses *must* be pulled considerably to enable them to do their best.

When this is the case it is useless to expect to remedy the

pull and preserve the trot by means of substituting a severe bit for a plain snaffle, for it is not severity on the mouth that he requires, but a sort of stay upon which he can support himself in the flying trot, and without which he is afraid to put forth his best efforts.

Hiram Woodruff, in his "Trotting Horse of America," gives an old-time instance of this kind in the old trotting horse Alexander, that was taken to England many years ago, and could not be made to trot a bit by those who had purchased him expecting great things. Afterwards William Wheelan went out with Rattler, and the gentleman who had Alexander no sooner saw him ride the former against the Birmingham mare than they got him to go and look at Alexander.

He found him well cared for, but on being shown the cruel bit with which he had been used our young American ceased to wonder why he would not trot for his English owner, and when Wheelan had changed his hard bridle bit for a plain snaffle he demonstrated that the American-bred horse could trot on English just as well as American soil when properly handled.

I give this as a case in point, showing that a horse relied on his driver to steady him in his great bursts of speed, and which he could not do with a cruel, harsh bit.

I want my colt to be driven with a light hand and a loose check; he will then swing off at his own gait, whereas, if you put weight on the bit and check him up taut, he will be fighting the bit, unbalanced in gait, and in no temper to trot; and if this treatment is continued for awhile the colt will have a hard mouth and will learn to lug on the bit.

Marvin says that Sunol would have been a puller under any but the most careful treatment. "Whenever she showed an inclination to 'lug' I would let her have her head, talk to her, and let her go along as easily as possible, without being hard held, and she gradually forgot to pull; but had I fought her with the bit she would have been ruined."

After a horse has learned to trot fast I like to have it take the bit just enough to steady it in its races.

It is a noticeable fact that the most successful drivers of trotting horses seldom use a whip; even when hard-fought races are on and sensational finishes are made and the extreme limit of speed is secured, it is, in most cases, without the use of the whip. There is a lesson in this, not only for the driver of the trotting horse, but for those who handle any other kind of horses.

It is seldom that the fastest yearlings make the swiftest two-year-olds, or the fastest two-year-olds the sensational three-year-olds.

Sixty-four trotting two-year-olds took records better than 2.30 during the present season of 1894, thirty-nine pacers being included in the same list, a total of 103, a larger number than ever entered the list in one season before, at two years of age.

CHAPTER XXX.

TRAINING VICIOUS HORSES.

Old English method — Biting, kicking, and balking — Patience and firmness required — Causes of balking — The cord — Isolation — Kicking in harness — Checking — Biting — Rarey's method — War bridle — Pulling on the halter — Shying — Pawing in stall.

THE subjection of vicious horses has been a great consideration ever since they were first ridden by man, but until a comparatively recent date has there been but little rational means employed for their subjection. The plans heretofore adopted have generally been too much according to the directions of an English trainer of the time of Queen Elizabeth, who wrote as follows: "If your horse does not stand still or hesitates, then abrate him with a terrible voice; and beat him yourself with a good stick upon the head between the ears; then stick him in the spurring place three or four times together with one legg after the other, as fast as your legges might walk; your legges must go like two bouching beetles."

To J. S. Rarey, an Ohio farmer, is due much of the improved methods of handling and management of the horses of to-day.

Unlike the three mythological graces, attendants of Venus — Agalara, Thalia, and Euphrosyne; or of the three Christian graces, — Faith, Hope, and Charity (the greatest of which is Charity), the three vices in horses are biting, kicking, and balking, and the greatest of these is balking.

Strange as it may appear, I regard kicking as the least of these vices; yet I, at my time of life, do not care to purchase a kicker, but if I do I want to know it then and there, that I may not afterwards discover it at too great a cost — possibly that of life itself.

When we come to think of it, is it a wonder that we have among us so many unsafe and unreliable horses? There is probably no one thing that people are more conceited about than the matter of handling horses. Our city lady friend will tell us that she can drive a horse, for while she was out in the country she drove the hay-cart to the field twice. Pat can drive, because he "follied a horse in the auld counthry above foive years." "Old Jehu" can surely drive for he was "brought up among horses." John Bull knows all about "'orses," for he has seen the "big uns in Liverpool," while Snob has proved his skill by passing every rig on the Brighton road.

And yet the majority of the self-sufficient ones would come nearer the truth if they used the language of a "green hand" I once had — a recent importation from the Emerald Isle — who, on being questioned as to his ability, replied: "Yes, faith and I can drive him just wherever he has a moind to go."

It is owing more to the natural intelligence of the horse than to the care and judgment of the driver in many cases that serious accidents are averted.

BALKING.

It is rarely that we find a balky horse that is not a good one. They are usually very hardy, high-spirited, quick, comprehensive, and of a strong nervous temperament. A balky driver often makes a balky horse. In handling colts and horses the trainer or driver should never lose his temper; but if he should, from any cause, happen to do so he should not let the animal know it.

I once had a neighbor in Pomfret, Conn., — Rufus Pike — who was quite a successful colt-breaker or trainer. I have often heard him remark that he frequently became very much tried and annoyed by the foolishness and stubbornness of colts in training, and that as he was himself a nervous and high-tempered man he often got pretty *mad*, but that he never dared let the colt know that he was mad.

Horses know nothing about balking until taught it from improper management, and when a horse balks it is generally due to some mismanagement, excitement, confusion, or not knowing how to pull; and seldom from any unwillingness to perform his duty.

High-spirited, free-going horses are the most subject to balking, and only so because drivers do not properly understand how to manage them. This kind of a free horse in a team may be so anxious to go that when he hears the word he will start with a jump that will not pull the load, but will give him such a severe jerk in the shoulders that he will fly back and stop the other horse; the teamster will continue this driving without cessation and by the time he has the slow horse started again he will find that the free horse has made another jump forward and again fallen back, and now he has them both balked and so confused that neither of them know what is the matter or how to start the load. Next in such cases will come the cracking and slashing of the driver's whip, until something is broken or he is through with this course of treatment.

It requires a steady pressure against the collar to move a load, and you cannot expect a horse to act with a steady, determined purpose while you are whipping him. Almost any team when first balked will start kindly if allowed to stand for five or ten minutes as though there was nothing the matter, and then speak kindly to them and turn them a little to the right or left so as to get them both in motion before they feel the pinch of the load.

To break a horse that has been in the habit of balking, you want to commence as with a colt and go slow. Take plenty of time to educate him. First, put him beside a steady and true horse; have check-reins on them but left loose; tie up all traces and straps so that there will be nothing excitable about the harness; walk them about as slowly as possible; stop often and go to the balky horse and gentle him; do not use the whip at all nor do anything to excite him, but keep him just as

quiet as possible; he will soon start off at the word and stop when told to.

As soon as he performs all right, hitch him to an empty wagon and have it in a suitable place from which to make an immediate start. Shorten the check-strap or stay-chain behind the steady horse, so that if necessary he can take the weight of the wagon; the first time you start them do not drive more than two or three rods; watch your balky horse closely, and if you see he is getting a little excited, stop him before he stops of his own accord; caress him a little and start again. Drive them, if practicable, over a small hill a few times and then over a larger one, all the while adding a light load. This process should make any horse pull true, and the above lessons had better, by far, have been given the colt while he was in training and thereby avoided the necessity of being applied to a balky horse.

Causes of Balking. Yelling and whipping on the part of the drivers, over-loading, sore shoulders, or ill-fitting collars, are some of the causes that make horses balk. In such cases kindness is much better than whipping. A horse is very susceptible to kindness. I have known quite vicious horses gentled into good behavior. Sometimes the loosening of a strap or unchecking and re-checking will answer the purpose, as it takes his attention in another direction. Sometimes in obstinate cases it may be well to unhitch from the vehicle and, after tying up the traces and loose straps, take one line and a whip and give the animal a short lesson in going around in a circle; after which hitch up and perhaps you will have no more trouble, but if so give another lesson in going around as before. It may, in some cases, take two or three lessons of this kind.

My experience with balky horses teaches me that there are different kinds of balkiness in them or else a difference of disposition makes some yield to a remedy that will have no effect whatever upon another. An universal treatment, suitable to

all cases, is yet to be discovered, but here is a remedy that in my experience has rarely failed:

Tie a small rope or cord in one ring of the bit; pass it under the upper lip and over the teeth, then out through the ring on the opposite side. When all is ready to start the horse, give the end of the rope a firm, sudden, but not violent, jerk; that is all. The horse will usually go. There is a sensitive membrane connecting the upper lip with the gum which the rope, when jerked, lacerates. This may seem cruel, but the stinging pain is but momentary and the after effects but slight. Too rude a jerk might destroy the membrane entirely, so that the same method could not be used again with so good effect. Consequently this, as all other methods of subjecting and training the horse should be skillfully applied. In cases where I have used the rope successfully no blood was ever found either on the rope or in the mouth of the horse.

Away back in the fifties, when quite a young man, I was conceited enough to believe myself smart enough to swap horses and hold my own with the average horse jockey of those days; the result was that I occasionally got more in a horse than I had bargained for or had even anticipated getting, and among which would be an occasional chronic balker. I distinctly recollect on one occasion of purchasing a large bay mare, sound and apparently all right, but which was so much opposed to the draft family as to consider it far beneath her mission on earth to handle any load more than a buggy or, at most, a family carriage. Consequently, when I had hitched her to a light load of fence-rails she utterly refused to take any stock in their transportation. Being, myself, at that time of life, quite hasty in disposition, and possessed of considerable "push" as well as impatience, I naturally enough, perhaps, felt much annoyed at the turn affairs had taken, and especially so as it was a very busy time of year with me — as I was a farmer — and I did not wish to be delayed in my plans; consequently, I attempted to reform "the old jade" right then and there by vigorously applying the whip, and after using up the

whip, a good hickory sapling, but to no avail. All I was able to accomplish by the whipping was to excite her to rear and plunge and throw herself. I then changed my tactics and, being in the woods, I tied her to a tree and left her there. This was in the forenoon. Towards evening I returned to see how she was getting along and again hitched her to the wagon, when she again refused to budge one inch. I did no more whipping, but again hitched her to the tree. The next morning I visited her again; she was evidently getting very lonesome as well as hungry and thirsty, still, she again refused to draw the wagon, and consequently I again left her "alone in her glory." After dinner I called on her again. She appeared very glad, indeed, to see me, and whinnied with joy at my approach. I again hitched her to the wagon, and you may depend upon it that she was glad and anxious to move it. Well, the result of this whole matter was that I owned the mare upwards of two years, and scarcely ever owned a better pulling animal alone or in a team, and when I finally sold her I warranted her to pull in any and all harness.

A horse left alone, hitched to a tree or post, soon becomes as lonesome and discontented as, perhaps, a person would under the same circumstances, and I claim this method, if rightly used, is less cruel, and better for both horse and man than to cruelly beat the animal with whip or club.

KICKING IN HARNESS.

Having, as before stated, some experience in "swapping" horses, and as "swap horses" are usually composed of nearly all classes — except good ones — I have occasionally drawn as a prize in this business an inveterate kicker. Now, while I would not at my age and experience purchase such, or advise my friends to do so, especially as a family horse, yet I have driven and successfully used in my business, at different periods, some mares that were considered even incorrigible and pronounced utterly worthless as harness animals. I remember a case in point occurring years ago, when I swapped a well bred

unbroken colt of my own raising for a young Morgan brood mare in foal, "sight unseen" (as the boys used to swap jack-knives), the animals being upwards of sixty miles apart when the trade was made.

After having made this trade it was gradually revealed to me that I had secured a kicker of the first water, and that the last three owners had not dared make the attempt of even putting a harness upon her. But I want to say right here that this proved to be one of the best horse trades I ever made in my life. I kept and used this mare for upwards of two years, and used her in any and all places any one could need use a horse, *viz.*: in the field, on the road, on a milk wagon, under the saddle, and in all ways a general purpose horse might be used; and, among other things, this mare, beside another Vermont Morgan mare, cut twelve acres of heavy grass in a day, driven by my son. Now, how would I use a kicking horse in harness?

In the first place, check pretty hard with an over-draw check (let me say right here that this is the only use I ever had for an over-draw check, as they are very cruel if used long at a time, and especially so if buckled at all tight). Tie the tail, at the end, firmly into a loop, fasten with a strong, but small, cord to the whiffletree; have the string just long enough to allow a very slight motion of the tail. Firmly fasten by the middle to the end of the string a small, smooth, round piece of stick of tough, hard wood, a little thicker than a lead pencil. When you hitch the mare up run this through the loop, fix it securely across and go ahead. She will not try to kick many times rigged in this way, before giving up, as she cannot kick if she wishes to. I will repeat that the cord must be strong. Perseverance guarantees success in this case. I would also recommend the wearing of a regular kicking strap on all animals driven in single harness that are at all liable to kick.

BITING HORSES.

Horses have been successfully cured of this vice while in harness, by putting a piece of hard wood an inch and a half square into the animal's mouth, about the same length of an ordinary snaffle bit. It may be fastened by a thong of leather passed through holes in each end of the wood and secured to the bridle. It must be used in addition to the bit, but in no way to impede the working of the bit.

Rarey adopted this plan with the zebra in the Zoo, who was a terrible brute at biting. Mr. Rarey succeeded, however, in taming and training him to harness and drove him through the streets of London. Animals with this vice should be treated kindly in the stable, and not abused with pitchforks, whip, etc. An apple, carrot, or even a piece of bread, soothing language, and a kind pat, but a firm, watchful eye and hand, with the use of the above wooden bit will usually cure the most inveterate biter. The fact that he cannot shut his mouth so as to grip anything while wearing the bit, soon dawns upon him that he is conquered.

Jennings cites a case where he cured a horse of this habit by putting something like a war bridle on him and tying the same to his tail in such a manner as to cause him to go around in a circle if moving at all, and then, with a whip, keeping him at it with occasional let-ups until subjugated and cured.

To shoe a kicking horse connect the head and tail by means of a small rope securely fastened to the tail and then to the bit and drawn tightly enough to incline the animal's head to one side. This, it is said, makes it absolutely impossible for the horse to kick over the side of the rope.

Another way of subduing a horse that is vicious to shoe is to take a cord about the size of a common clothes-line, put it in the mouth of the horse like a bit, and tie it tightly on the animal's head, passing one ear under the cord, not painfully tight, but tight enough to keep the ear down and the cord in place. The Indian war bridle may do as well. Always be as gentle

and kind as possible with a vicious horse, and use soothing instead of harsh languge.

PULLING ON THE HALTER.

To break a colt or horse of this habit either in the stable or at the post, take a rope with a loop or ring in one end, pass the end with the loop in it over the animal's back just forward of the hip, letting it drop down at the flank, then run the other end of the rope through the eye or ring, making a slip-noose, and passing the rope lengthwise of the belly between the fore legs and up through the halter ring, and make fast to a stanchion or post, and then give him an opportunity to pull by administering some of the causes of his former pulling, and continue this from time to time until permanently cured, which will not require many lessons at most.

Shying may be recorded as one of the evils to which horseflesh is heir, and is generally the result of improper training or breaking of the colt. The inconvenience, annoyance, and oft-times danger occasioned by a shying horse is anything but pleasant to its rider or driver. Shying in horses is undoubtedly the offspring of fear. Fear is the motion excited by suspicion, apprehension, appearance, or approach of danger. This may be termed natural timidity, giving rise to that kind of shyness with which colts and young animals are endowed ; another kind of shyness may be said to be acquired; but as I have gone over the ground pretty well in my views of breaking and training (see Chapter XXVIII), I will only say here that unless the eyesight is impaired and the animal shies from that defect, it is in most cases easily cured, as already stated in Chapter XXVIII. By all means do not whip an already frightened horse.

HUGGING THE LINES.

The best remedy that I know of for a horse that is in the habit of catching the lines with his tail and then hugging them so hard that it is almost impossible to get the free use of them again, is a leather pad some four to six inches in width and

the length of the width of a horse's tail. Attach buckles at each end so that the pad or enlarged crupper may be buckled to the back strap like any ordinary crupper, and put it under the tail. It will elevate it so that the horse cannot hug the line, and, moreover, it will cause him to carry his tail in a graceful and showy position. The cost of this simple and safe arrangement is but a trifle.

PAWING IN STALL.

It is sometimes the case that a horse becomes very annoying to their owners and grooms by the habit — although not necessarily a vicious one — of almost continued pawing while in the stall. My own remedy for this habit is to buckle with a strap (a common hame-strap will do), a piece of chain about the size of a trace chain, and some two to four feet long, around the fetlock of the foot most used in pawing, leaving the other end of the chain to lie loose on the end of the floor of the stall. This simple method usually effects a permanent cure.

THE INDIAN WAR BRIDLE.

This is a simple and inexpensive arrangement, and has been used by the Indians and Mexicans for many years, having been mentioned in the "*Veterinary*" of London, England, in 1828, as used by the North American Indian in subjugating his wild horses of the plains; hence the name, Indian war bridle.

This bridle, as formerly used by the Indians and Mexicans, although a simple arrangement and easily made and applied, is, nevertheless, when properly used, a powerful means of controlling wild or vicious horses, and may be advantageously used on kickers that kick while being harnessed, groomed, or shod.

To make this Indian bridle, take a three or four ply rope or cord (the cotton cord is much the better, as it works smoothly and is much softer than any other). To prepare the cord for use tie a knot in each end and then make a loop by doubling the cord and passing the knot through; these loops should be at such distance from the knot as will allow the cord to pass

around the neck at one end and the lower jaw at the other, passing the knot through the loop from the opposite side of the loop to where it first passed through in making the loop, thus bringing the thickness of the cord in the center of the loop. By this means safety is secured, the cord slipping easily through, preventing the possibility of its getting fast, as it would likely do if passed through the loop from the same side it originally came through. The necessity of this arrangement will be seen in applying the cord.

We have here two principles involved : first, steady pressure upon the lower jaw, and, second, friction in the mouth — the one stationary in the mouth, the other slipping through it.

The Rarey cord, as used by Mr. Rarey, was a very simple but powerful means of subduing a vicious or headstrong colt or horse, and consists of a cotton rope or cord (about clothes-line size) with a loop at one end long enough to slip on the under jaw, the other end going up on the right side of the neck, over, down on the left side through the loop on jaw; the part that crosses the neck should be well back towards the withers to give it a purchase.

A strong pull or sudden jerk on this will make quite an impression upon almost any horse. This cord is calculated to accomplish the same results as the war bridle, and is much on the same principle.

CHAPTER XXXI.

TRAINING CIRCUS HORSES.

Height of perfection in training — Skillful education — Mild treatment best — Sensible to plaudits of audience — High prices for trained ring-horses.

THE height of perfection in training seems to be found among circus horses, and whether a man is in sympathy with horses or not, if he has any admiration for them at all he certainly must approve of the acquired intelligence which the trained horses for a circus exhibit. The manner of training these horses is also interesting. The education must be given in the most skillful manner, and some points in regard to it will not only be interesting but may aid those who have the training of horses for everyday purposes in doing their work more intelligently.

In reply to the inquiry as to how he trained his horses, the trainer of all of Barnum and Bailey's trick and ring horses, said: "The first thing that we have to do when we get new horses is simply to keep them in the stables with the others until they get used to their company. It is a singular thing, too, how jealous the old horses are of the new comers. You may laugh if you want to, but horses really have their way of 'guying' green stock.

"After the horses get used to their surroundings and their stable companions, we blindfold them and take them into the ring. While they are blindfolded we train them to the circular motion,—that is, we make it appear natural to them to run around in a ring. This requires a good deal of time and patience. It generally takes a month to break a horse to this. The natural tendency of the animal is to go straight, and the going round is unnatural to him. Nowadays we use a

system of check and lines that makes the process much easier to him. After the horse has been taught to run around we take off the blindfold, and the performer for whom the animal is intended begins to try tricks with him. The horse is naturally very observant and his natural bent is to do what he sees another horse do; so when we are teaching a new horse tricks we place him alongside of another, who has been trained, to give him confidence, and the two work together. The rider will first try one and then the other. It is a great mistake in thinking that punishment is resorted to in breaking in circus horses. Horses that are broken by violent treatment are not to be depended upon, and for ring purposes we must have horses so trained that they can be absolutely relied upon.

"A good animal that has been trained for the ring, will, technically speaking, 'feel' his rider and accommodate his motions as much as possible to the work that the rider has in hand. Such a horse is the delight of a bare-back rider; and, by the way, nearly all the riders have their favorite animals.

Circus horses are as sensible to the applause of the audience as are the riders. It is wonderful what a horse will do under the stimulus of applause with what he will not do when the audience is cold. Horses are likely, however, just as performers, to lose their head when the approval is too stimulating. This is one of the reasons you see the check and reins with which a circus horse is provided; they are not intended wholly for ornament as most people suppose.

"A well-trained ring-horse is worth easily $1,000. Riders who earn large salaries generally like to own the horses that they ride; they like to give them their personal attention. Generally the riders in a circus who own their own horses make up a pool together for the employment of a first-class groom. A circus horse needs the most careful attention. Prior to every act his back has to be rubbed with rosin, so as to prevent the rider's feet from slipping; this must be carefully washed off after each act or the horse's back would become sore in a short time.

"A first-class groom has to be, in fact, something of a veterinary surgeon. There are really few accidents to the circus horse when one considers the work he has to do.

"We have horses here that have been in training for ten years. The ring work is not particularly wearing upon them when they become accustomed to it; it is the traveling around the country that tells on them most. At the same time they get the best treatment. The food given them is of the first quality.

"I have trained horses that Mr. Barnum, Mr. Bailey, and others have valued at $5,000, simply because of their training. Such a horse must be good blood.

"You might think a horse trained for the ring and kept in it year after year might lose any speed he might have had, but we have horses here now that we used in the ring work that could trot a mile in 2.35 to 2.45."

CHAPTER XXXII.

FEEDING AND STABLE MANAGEMENT.

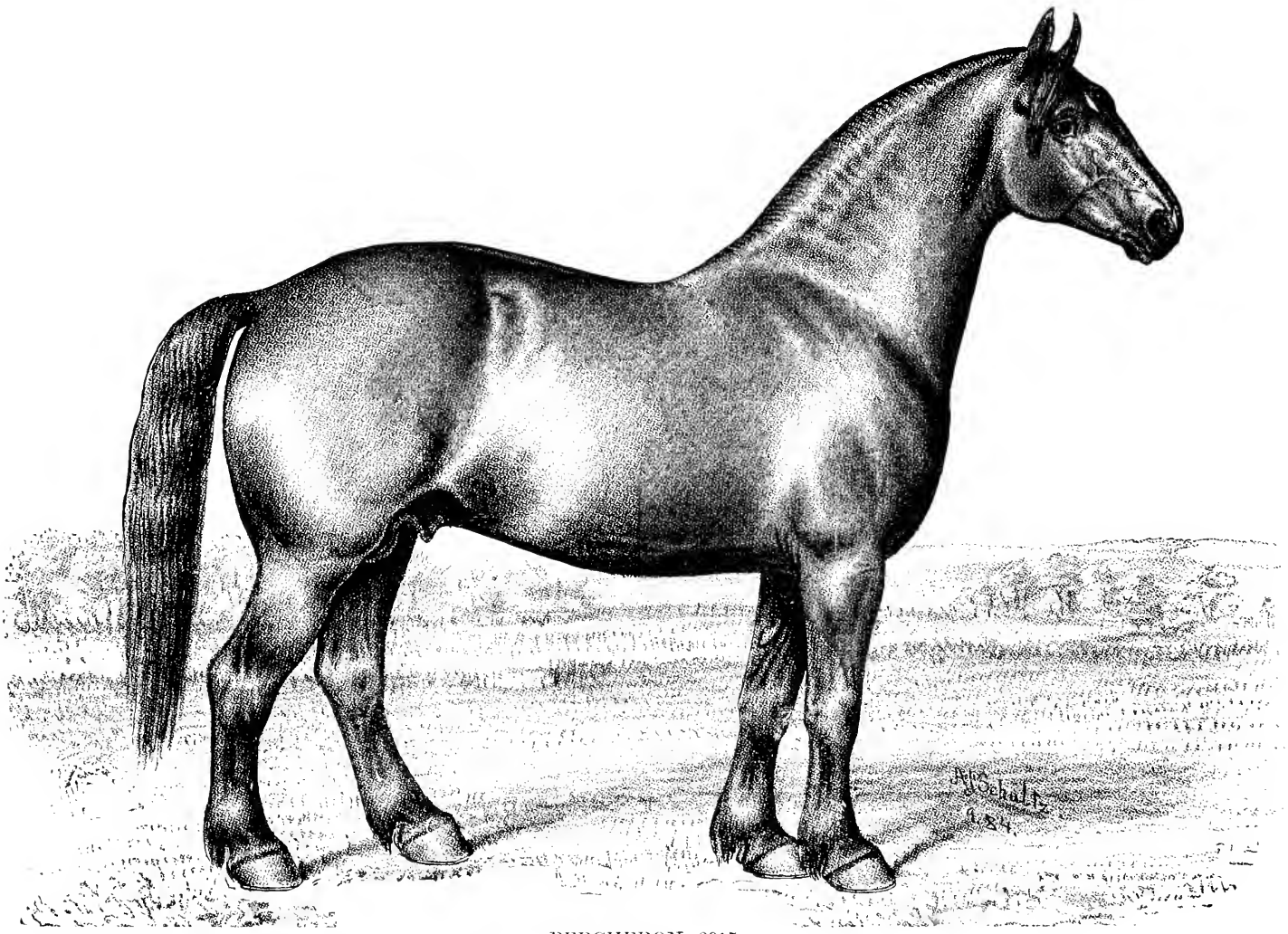
Value of different foods — Neatness and cleanness — Change of food necessary — Treat kindly — Indian corn — Watering — Corn meal — Flax seed — Roots — Light and ventilation — Blankets.

ALMOST any man can work around a horse-barn, but to properly understand feeding and the best care of horses in the stable, is a trade of itself, and one which has but few experts.

The lack of proper knowledge of different foods for horses under peculiar conditions, as well as lack of judgment under circumstances relating to the care of horses when they are out of condition, added to carelessness, inattention, and poor treatment when disease attacks the vital portions of a horse, is a source of much fatality among them, and annually shortens the lives of many good ones.

Among the vast horde of horses that die every year there are only a few that are really worn out. The most of them die from some cause or other, and these causes are what horsemen should look after if they desire to have their animals live to "a green old age." It is generally easier and cheaper to preserve horses once procured than to obtain new ones. Aside from accidents, a sound horse should be as good at eighteen or twenty years old as at any other age, yet we find but a few who, having lived to that time, are still able to do even a few days work without great fatigue.

Owners of horses should study the care of them in order to get the greatest amount of service out of them, if for no other reason. Remember that with your horse, as with yourself, every time you do an imprudent thing you will have to pay dearly for it. If the results of poor care and bad management



PERCHERON, 2915.

Percheron Stallion; imported and owned by Powell Bros., Shadeland, Pa.

of horses could be seen immediately there would, undoubtedly, be more thought given to the matter.

A French investigator, by an elaborate test, found that oats were especially good for horses. By an electrical apparatus he found an excitable principle in oats which he called a nervine, and he discovered that crushed oats were more active and not as enduring as the whole grain, used as horse food.

It is understood by the practical horseman that oats favor more speed and endurance in the horse than any other food. Experience has proved, beyond a doubt, that as a grain food for horses, few, if any, feeds are superior to oats. Many farmers and teamsters, however, by experimenting, have decided that other grains may be cheaper and answer nearly as well.

As to the cheapness of feeding horses with grain, as far as the cost of the grain itself is concerned, there is no doubt that ground grain mixed with cut hay, or hay and straw, is the most economical; but in this manner of feeding we must have the conveniences not otherwise required in feeding whole grain, and the extra time it takes to cut and grind the food should also be included in the expense account.

When corn is worth less than a cent a pound, the feeding value is, no doubt, in favor of corn, but corn being very hearty great care must needs be exercised in dealing it out. Constant feeding of corn for two or three months often deranges the entire system, requiring a complete change of diet, and often necessitating the services of a veterinary.

The thick hull covering the oat kernel prevents fast eating; consequently, more saliva is formed, which aids digestion, yet some horses eat so voraciously that some kernels are swallowed whole. In such cases either have the grain ground and fed dry or place several stones two inches in diameter in the feed-box. These will prevent the grabbing of a full mouthful of grain at once, and thus cause twice the time spent in eating a given quantity. There is a vast amount of ignorance exhibited in

feeding horses. Some owners feed their horses when most convenient, regardless of the wants or necessities of the animals. The capacity of the horse's stomach is about sixteen quarts; people who are ignorant of this fact fall into many serious errors.

No one owning or having the care of intelligent horses should have to be told how necessary to good health it is that everything about the horses, and most especially about the feed-boxes and mangers, should be perfectly neat and clean. It is too often the practice of the attendant to empty the contents of the measure into the feed-box without once glancing in to see if it is in condition to receive the food. If the horse does not eat his food out clean the box should be cleaned out before another feeding time.

There is no animal more fastidious than the horse, and if there is a little grain left in the box from time to time, it soon commences to decay or mould and offends the horse's sense of taste and smell. For the same reason the hay-rack or manger should not be crowded full every time the horse is fed; give but a small feed of hay at a time; usually about seven pounds is enough. Following this direction the hay will always be fresh and the horse will not gorge himself, but will eat it much better and do much better.

A horse requires an occasional change of food, as well as the human being, but great care should be exercised in the change from time to time instituted. Unless intelligence is exhibited in feeding, the results frequently result in disaster. Feed and water as regularly as possible.

It is a fact well worth bearing in mind that YOU CANNOT ILL-TREAT YOUR HORSE IN ANY WAY WITHOUT MATERIALLY DEPRECIATING HIM IN VALUE.

A state of uneasiness and restlessness by horses being yelled at or unmercifully beaten about the stable, often lessens their value and, indeed, often makes them worthless, when the satisfaction of handling them is considered. A humane man will be more guarded about using harsh language and ill-treatment

about a horse than he will about a person. The latter can reason and consider the source and circumstances, while the former, acting only from instinct, is more deeply impressed by the treatment received.

Vicious and stubborn dispositions are often the results of poor stable treatment, and it is not to be wondered at. If a horse can be soothed by gentle words — and there are but few that cannot — then it naturally follows that different treatment will produce different effects.

In feeding grain to horses it is important that it should be fed at such a time that it may remain in the stomach as long as need be to secure its complete digestion.

The nitrogenous elements, in which grain is richer than other food, are better digested in the stomach than in the intestines. The grain should be fed after the hay has been eaten, and no other food or drink should be given for some time after, so that the grain may remain in the stomach until fully digested.

If the grain is fed first and then a ration of hay, the grain will speedily be forced from the stomach by the hay and will not do more than about half as much good as if fed after the horse had eaten about seven pounds of hay and had all the water required.

This system, although contrary to the general practice, is well worth the owner's consideration in feeding horses.

Indian corn is the great food crop for animals in this country, and is produced in nearly every county of every State, and probably more cases of horse colic arise from feeding corn-meal than from all other foods combined; and this especially occurs among farm horses, as farmers study the philosophy of foods very little, or the effects of the conditions of food upon animal health. They, naturally, feed what is most convenient and cheapest, without considering that any *good* food can be other than healthy.

In my experience as a veterinary practitioner I have known of the death of many horses, which, by examination, proved to

be caused by feeding corn-meal alone. Some feed it wet and others dry, but, when fed alone, it is more dangerous wet than dry, for when wet it may be swallowed with but very little mastication, while the dry meal must be masticated until the saliva saturates it before it can be swallowed, and the saliva is a more active agent in the process of digestion than is mere water; therefore, it is in better condition for digestion when fed dry than when fed wet.

In my experience of upwards of forty years in feeding horses I have never known any serious effects from feeding even the finest of corn-meal when mixed with cut hay or straw. My plan of mixing is to moisten the hay or straw (or both mixed, half and half) just enough to cause the meal to adhere to it that it may all be eaten together. Be careful in the mixing and not get the hay too wet.

My experience with horses and hostlers leads me to say that there are as many horses injured by over-feeding as by under-feeding. It should ever be borne in mind that every bit of food placed before a horse more than his capacity for assimilation and digest is not only wasted, but is positively injurious to the horse. It should be the study of all horse owners to see that their animals do not go to bed at night either hungry, thirsty, or suffering from too much supper.

It would be assuming too much for me to say how great or small a quantity you should feed your horses, for you will find by closely watching a stable of a dozen or more horses that some require much more feed than others. It is the same with men; what is eaten by one small man will sometimes be a sufficient quantity for two larger ones, consequently I do not wish to place myself on record as saying just how much or how little you shall feed your horses, but would advise the owners themselves to see on how *little* food a horse can work and thrive rather than to see how much food he can get away with.

Of muscle-producing food, beans are first, oats second, and barley third. Of fat-producing food, Indian corn stands first, pease second, and barley third. Wheat is also a most excellent grain to be judiciously fed to all animals.

All grains should be ground in order to be of the greatest utility to animals, and especially horses, when mixed with cut hay or straw. Wheat bran is not only a food rich in muscle and bone-forming matter, but a medicine for the bowels which may be classed among the safest and best as well as cheapest.

Flaxseed, oil-cake, and oil-meal are all excellent in their way of keeping the bowels open and in a healthy condition when judiciously fed in connection with dry food.

Roots occasionally fed to all horses in winter are not only wholesome but toothsome. Among the different varieties of roots grown here in America, I prefer carrots for horses, but parsnips may be quite as good. An occasional feed of apples when plenty and cheap, and especially sweet apples, are usually much relished by all horses. Even turnips and potatoes for a change to horses that will eat them are to be recommended in winter, as all these, while making a change in their diet, have a tendency to regulate their bowels also.

Next to roots and fruit for this purpose, flaxseed, linseed meal, and wheat meal are advisable.

Salt should be so administered as not to overdo or underdo the matter. Provide each horse with a sufficiency, and not force more upon him than he requires. My present method of salting horses is to place quite a lump of mineral salt in the feeding box or manger of each horse, and when it has all disappeared replace it with another.

I know that in this way some eat twice as much as others — possibly too much; but I know of no better way in which to salt horses while in the stable, and, when in the field, I usually leave lumps of salt within their reach and where they can have free access to it.

All stables for horses should be well provided with light and ventilation without draught.

All work and driving horses should be well bedded every night and well groomed every morning.

Blankets are to be used when necessary, but care and judgment must be exercised.

CHAPTER XXXIII.

MANAGEMENT OF TEAMS ON THE FARM AND ON THE ROAD.

Don't rush in the morning — Good *vs.* poor teamsters — Noon feed — Groom properly — Blankets, etc.

FARM TEAMS.

DON'T rush the teams in the morning or after a long rest; warm them up gradually if you would get the most out of them, and give them the least necessary fatigue. When plowing, the first round or two in the morning should be made as easy as possible; and if the plowing is hard on the team, as, for instance, heavy clay land, when they are obliged to pull quite hard all the time, — it should frequently be stopped for just a little while and not allowed to get over-heated, exhausted, or discouraged.

I have had many farm-hands and teamsters (?) to work for me, and nearly as many different kinds as numbers. For instance, I have had a man who would take a team in the morning fresh from the stable and in my toughest plowing in Indiana clay soil, would do a good forenoon's work and bring his team in at noon in good shape to water and feed. You would seldom hear this man speak to his team, and never hear him yell or scold at them; he would do a good spring's work and keep his team in excellent order all through. Look to the field whenever you would, you might invariably see his team moving quietly and steadily along. He made frequent stops, however, but of very short duration; always when he stopped he backed the team a step and usually raised their collars to give air and to see that all was right.

I have had other plowmen and teamsters who, when working their teams, would bawl and swear at their teams until they

might be heard all over the farm; these would rush them for all they were worth for an hour or two until they were reeking with foam and sweat, and then stop them half an hour or more at a time, letting them stand all the while on a draw with traces taut and bracing in the collar, while they rested sitting on the plowbeam; and perhaps when the dinner bell rang they would bring them to the barn so heated that they could not be watered or fed for half an hour. Such teamsters, — if by such name they may be called, — will use up a good team in an incredibly short time, as I know by observation.

Some teamsters will annoy and fret a good team with spirit and mettle more by constant yelling and swearing at them — and take more out of them in this manner — than will all the work they are able to accomplish.

In the spring of 1894, I hired a young man from Ohio to work for me for the season, and gave him a good team to work. Both horses were well-bred, and belonged to the American trotting family, both were full of life and spirit, were in the best of health, and in excellent condition. They were both intelligent and good dispositioned animals, but rather nervous; both were willing to do lots of work, doing it cheerfully, steadily, and pleasantly.

This young man commenced bawling and swearing at his team from the very start. We could hear his foul language all over the farm and into the house, even; not only that but he soon became a neighborhood nuisance through his loud swearing at one of the very best teams ever hitched to a plow or elsewhere. He had lungs like an ox and the voice of a foghorn. I cannot now see why I should have kept him for a month, but I did, for he was a good worker for the times, and I suppose I thought that by reasoning and talking with him I might reform him in the manner of using a team, — but it was of no use. I could not change his methods, and so I sent him away. I then engaged the services of a mild-mannered young man (a graduate of a commercial college) to work this same team. He soon proved himself to belong to the chronic

lazy class, and required a large amount of sitting down in order to accomplish a little work. He would rush his team for all they could stand for half an hour or so and then stop them for as long a time while he sat down and had a good rest and smoke. The noon bell would frequently catch him with a very light forenoon's work accomplished but with a heated and fatigued team. He also was a great hand to yell and scold at his team; but it was a busy time of the year and good help very scarce, so I kept him two months, and at the expiration of that time his team was in an excellent condition to make first-class scare-crows of.

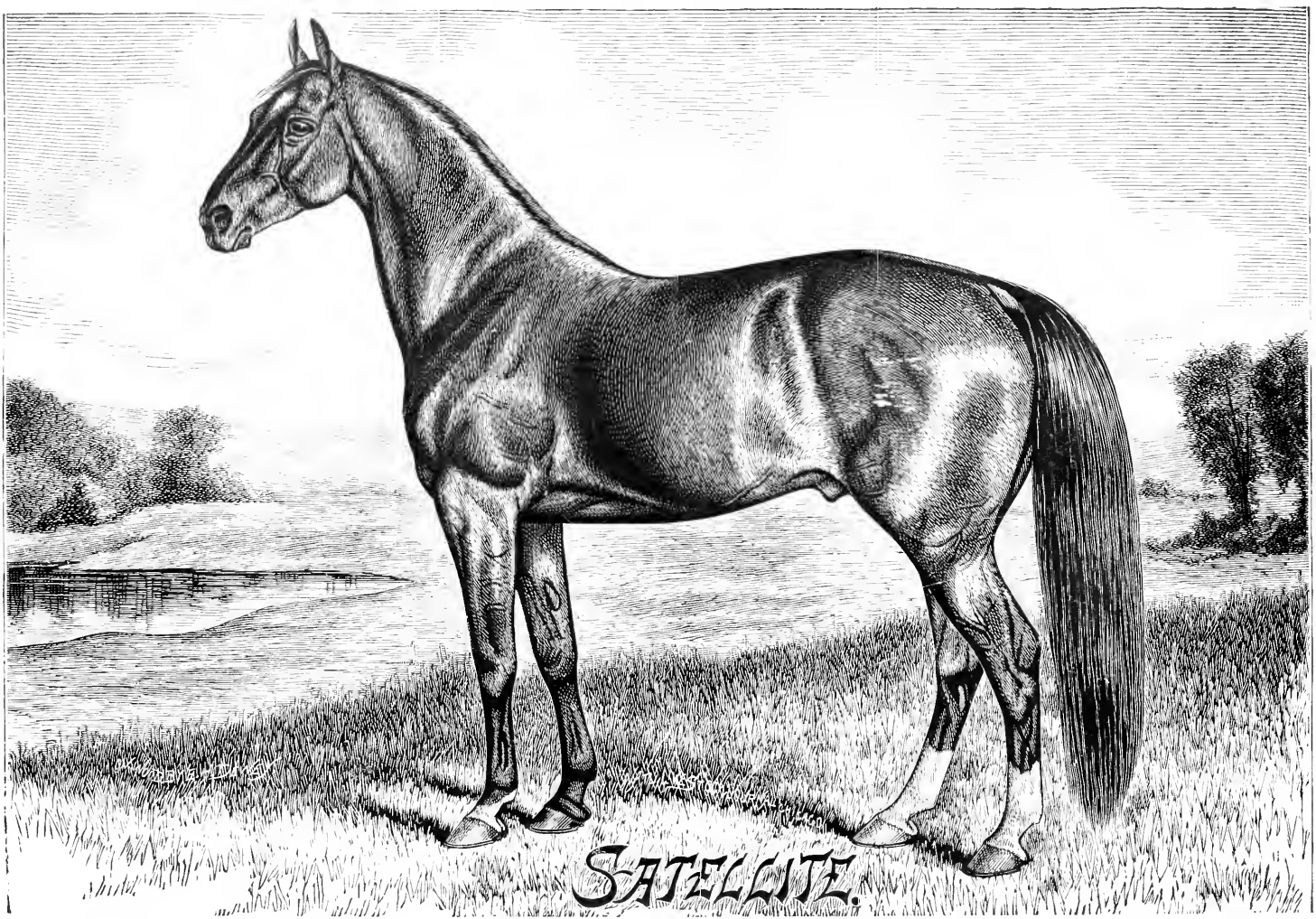
Now had this same team, with proper handling and proper care been well managed at their work, they would not only have accomplished all that they did, but would have held their own in flesh and condition. I give this illustration here as not one of great singularity, but a recent one, and one that I was much interested in.

If farm horses are fed loose hay at noon they should have time to eat it before being fed grain; then as soon as done eating their grain they are ready for the field. Not to exceed seven pounds of hay should be given at one feeding to each horse. Always water on coming to the stable if team is not too warm; if such be the case they may eat their hay first, then drink their fill, and eat their grain lastly. Remember to feed grain after hay in all cases, in order to get the most from the grain.

MANAGEMENT OF HORSES ON THE ROAD.

When farm horses are not much used on the roads, and are required to haul heavy loads long distances, their drivers should use great care not to allow them to become too much wearied; for, when in this condition, excessive sweating is liable to cause severe chills and colds, often producing internal fever accompanied by severe constipation or stoppage.

Farmers should go on these trips to market in cool weather, prepared to give warm clothing while the team is resting. Laxative food should also be given in moderate quantities, as



Trotting bred Stallion, foaled in 1866, bred by A. Whipple. Owned by Powell Bros., Shadeland, Pa., and the Premier trotting Stallion of that great horse breeding establishment. Satellite is the sire of Goldenbow and many other trotting sires of note, and

an ounce of prevention is worth more than a pound of cure. There is nothing better for this purpose than boiled flax-seed; this in small quantity mixed with other food is very soothing to the stomach.

When flax-seed cannot be obtained, linseed oil-meal will answer as well. Oats are the best grain-food for teams either working or driving on the road, but oats and barley in equal portions ground together make an excellent ration.

Another matter that farm teamsters are quite likely to neglect, is proper grooming. Thorough cleaning for a work-horse is said to equal a small feed of oats. There is no doubt about the healthfulness of good grooming. Proper attention to feeding, cleaning, and blanketing will be found much cheaper than to engage the services of a veterinary after your animals are taken ill.

CHAPTER XXXIV.

MANAGEMENT OF ROAD AND DRIVING HORSES.

Start out moderate — Long distance — Water frequently —Checking — Hitching to buggy — Whip — Feeding on the road — Short-distance driving — Reins well in hand.

THERE have been periods in my varied and busy life when my business required much driving on country roads, and sometime of upwards of sixty miles in a day. I usually had a good horse for these long routes, and knew — or thought I knew — very well how to drive and take care of them. My way was — and is — when starting out with a recently fed and watered horse to drive the first five or ten miles about as slow as a good road horse will naturally travel, and by that time they will have gotten themselves into condition for good road work and will be ready to take a good, comfortable road gait for the next ten or twenty miles without distress or fretting. When driving on hilly roads I allow the horses to walk up hills and drive very carefully and with a snug rein down the hills, always taking advantage of the best, smoothest, and level places in the road to make up my time.

When driving long distances I never enter into brushes or races with others on the road, but always drive as steadily and easily as possible. Many has been the time when driving long distances on the road that someone has driven out of a yard or stable when I was about opposite, and, going my way, have driven past and away from me — perhaps entirely out of sight — but after a few miles of steady driving I have come up to them, and perhaps passed them and driven away, out of sight and hearing of them for the rest of the journey. When driving on the road in summer I water frequently, giving a little at a time. I never check hard when driving long distances —

nor any other time, for that matter. On the road I am very particular that my horse, if checked at all, is only very moderately so, and that he hangs quite loose in the harness. Most people, to my notion, buckle the hold-backs too tight; a horse cannot travel nearly as easily with the breeching drawn tight across him. I want it quite loose or left off altogether, although a hilly country road calls for the breeching; but be sure it hangs right, not too taut nor too low. Have it well up on the thighs and not so low as to have a tendency to trip in descending steep hills. So particular am I over this point of the hanging of the breeching that many has been the time when driving a horse harnessed by others, I have got out of my buggy and adjusted the same to suit myself, even though I were driving but a short distance.

As to the whip; there are few men who like a good whip, perhaps, better than myself; and I have thought that few could use one more dexterously when required to do so. I always want a good whip in my buggy when driving, no matter what the distance may be; yet, if kept for my use alone, a good whip would last me a long time, as I have but little occasion to use it.

One of the worst possible pernicious features of road driving is an almost continual clucking, tapping with the whip, and jerking on the reins.

I very much dislike to see the hair worn off horses from wearing the breeching too tight.

I have often thought were I a horse hitched to a fine buggy or carriage and compelled to stand the irritable driving that many good horses are subjected to, I would play "Old Abdallah" with the carriage, and serve it as he did the Long Islander's fish-cart many years ago, even though I were made to pay the same penalty for my rashness as he did for his — being turned out on a sandy beach to starve to death.

I have often observed that the best drivers, whether of teams or single horses; whether those teams were composed of oxen, stags, mules, or horses; whether being worked on the

farm, driven on the road, or even on the race track, were those who used the whip the least. In driving many different horses, of as many different dispositions, I have had at various times many occasions for the use of the whip; but in all cases I endeavor to have the horse fully understand why I use it and for what purpose.

In former times, when serving at county or state fairs as a committee on oxen and steers, I have admonished exhibitors in reference to the too free use of the lash — advising them to do their training and necessary whipping at home; then bring their trained animals only to the fair for exhibition, and not make too much of an exhibit of themselves or of their method of training steers.

While on this subject of training for fairs and the use of the whip, perhaps it may not appear as too great a digression from the subject under consideration for me to relate a little circumstance of several years ago. In September, 1873, I exhibited a beautiful pair of Devon steers at the Windham county (Ct.) fair. My steers were four years old only, and weighed about 2,400 pounds, and at that time were compelled to compete in their work with oxen of all ages and all weights. Their exhibition work consisted in drawing and backing a cart filled and rounded up with stones and probably weighing about two tons — not less. In this competition were oxen weighing all the way from 3,200 to 4,200 pounds, and probably not a pair competing for the prize weighing any less than 3,000 pounds. Well, the result of the showing was that all the teams were able to draw the load, and after much yelling and scolding and a good deal of whipping, several pairs were able to do something in the way of backing it. There were some twenty pairs in competition.

After all the oxen had shown what they could and could not do, I hitched my "little steers" to the cart. I could distinctly hear the murmur through the crowd that "Dimon will be unable to compete with the others," — that while he had a beautiful pair of steers, they were altogether too light and

young to compete favorably with their older and heavier competitors; that, while they *might* be able to draw the load up the hill, they could not possibly be expected to back it a single inch.

When all was ready I gave them the word and they, at once, started together, settling into their yoke, and took the load up the hill and around to the backing place just as well as any team had been able to do. Again the murmur ran through the crowd: "Dimon did very well at pulling, but he can't expect them to move that load backwards; they haven't the 'heft' for it."

So, again, when all was ready, all I had to do was to raise my whip before them and give them just one word, "Back!" Back they went, almost backing over three or four men who stood in their way behind the cart. The murmur of the crowd turned into a shout. They cried: "This is the only backing we have had to-day."

In this exhibition I only made use of the two words, "Come" and "Back." I did not strike them a lick with my whip. It was a case where I had done all of my training and necessary whipping at home, and the cattle already knew what to do and what to expect if they failed to do what was told them.

Then, in training horses, as well as steers, whether for exhibition or use, first teach them thoroughly just what you want them to do; and then it may be time to teach them what to expect in case of failure to perform what they are capable of doing.

In driving long distances on the road I only feed at morning, at noon, and at night. Some think that after a fifteen or twenty mile drive a horse should be stopped and fed, no matter what the time of day; I cannot agree with them. Feed regularly in this work just the same as in other work. Of course, if a horse is pulled out of a stable at midnight and starts off on an empty stomach, it cannot be expected that he will not need feeding again until noon; that would be too

long. Use judgment in this as in many other cases where it is impossible for the wisest head to lay down infallible rules to go by. If a man has no judgment in the use of a horse, he should not be allowed to use one, but be forced to turn his attention to other less responsible pursuits.

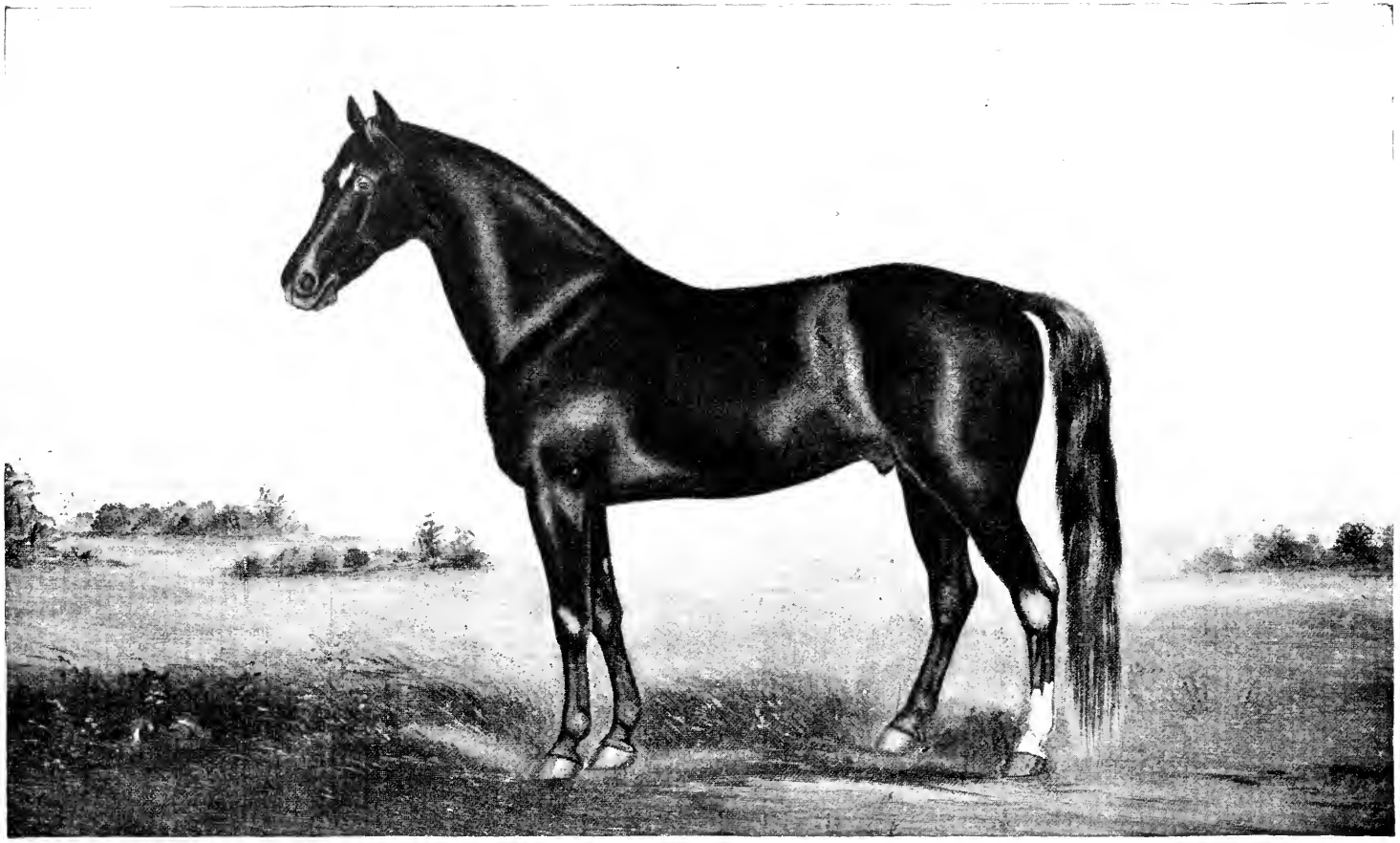
Having described my way in treating a horse on a long distance I will say a few words regarding short-distance driving. While at my time of life I like a "quaker trot" about as well as any gait — both as to comfort and safety for me — still if I have a good horse and the roads are good and I have only five or ten miles to go, I see no particular necessity of spending too much time on the road. Time is money, and life is too short to fool away too much of it unnecessarily. I contend that a horse well able to do so and without a heavy load, had better travel over a good, smooth ten-mile road in an hour and a half and receive good treatment at the end, than to spend two and a half hours on the road and receive no care at the end of the route.

Besides, the older I grow I more and more see the importance of making each hour count to the best possible advantage; for, as Longfellow has it:

> "Art is long and Time is fleeting;
> And our hearts, though stout and brave,
> Still, like muffled drums, are beating
> Funeral marches to the grave."

Always, when driving on the road, have the reins well in hand, always being "in touch" with the horse through his mouth. Then, if through any cause your horse makes a misstep, or shies, or stumbles, you have him under your control at once — as you otherwise could not do.

I have driven horses full of life and spirit, whose action and speed I could govern by the mouth alone, without a word or single act on my part except just slight variations in the pull or non-pull of the lines.



MOTION, 2.29.

A Morgan Stallion, bred by L. Gomee, Fitchburg, Mass. Owned by Jos. Battell, Middlebury, Vt. One of the best sons of the great trotting and roadster sire, Daniel Lambert, with 42 in the list. Motion sired Right Motion, the dam of Stockton King, etc.

CHAPTER XXXV.

HANDLING AND MANAGING TROTTERS.

The author a judge in races — The trainer — Driver — Swipe — Big-head — Early *vs.* late training — Toe-weights — Jogging — The mouth — Stabling — Treating a warm horse — Time to succeed.

IT has been said that "all money in trotters is in the handling." The management, handling, and driving the trotting horse in his races, is as much of a science and requires as much skill to do so properly and successfully, as that of almost any other profession. It is a trade of itself. If the candidate for this profession is not possessed of a natural taste, as well as ability, for it, then he had better turn his attention to other fields of employment.

Although, as stated in the preface of this book, I am not a professional driver in races, yet I have occupied the judges' stand in many very good races, trotted by some of the best horses and driven by some of the most expert drivers of their time; and from that standpoint, especially as it usually devolved upon me to act in the capacity of "starter" in the races, I have had an opportunity to learn very much as to how horses should be managed and driven in their best work. But the success in this business is not alone dependent upon the driver, for in the "swipe," or care-taker of the trotter, really depends nearly as much as upon the driver; inasmuch as the best driver would be unable to win purses with the best trotters not in condition to trot.

Were I in the business of campaigning a stable of trotters I should be very particular in my selection of the proper men to take care of the horses, as well as in the selection of the knight of the sulky to pilot them to victory.

If a horse makes a sensational hit in a race the driver often gets all the credit, while the poor swipe gets left.

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

If the horse comes to the "scratch" out of condition, and, in consequence, loses the race, then the swipe usually gets all the blame for this state of affairs.

Without doubt the talent necessary to be a successful trainer and developer of trotters, especially youngsters, is more rarely found than is the same amount of ability as a driver in races.

Another consideration is that a man who has thus been eminently successful rarely, if ever, fails to be a good driver in races; whereas some of the most renowned "knights of the sulky" are far from being in the front rank of the profession or art of carrying animals from the primary school to the graduating classes.

It may seem singular to those not intimately acquainted with the training of fast harness-horses that there should be any hesitancy in accepting advice from persons who, by study and experience, are fully qualified to give it; but those who have had such experience will agree with me that very many trainers, and some drivers as well, appear to regard suggestions as an implication of ignorance and resent it accordingly.

It more frequently happens, perhaps, in this business than in most others that a young man engaged in the capacity of trainer or driver gets what is sometimes called "big-head," which, when it attacks its victim with severity, is a most stubborn disease, and in some cases is incurable, but usually succumbs to study and experience.

I have known young men engaged a single season, perhaps, in the capacity of handling the trotter, that in their own estimation knew more about the trotting horse from beginning to end than those much more advanced in years, and who had made this subject a life-long study.

As to the early training of the trotter, unless you are particularly anxious to give your colt a record at an early age, notwithstanding all that has been written and said to the contrary, I maintain, as heretofore stated in Training for Speed, Chap. XXIX, that early maturity means early decay. I would

much rather have my colts intended for campaigning purposes grown up in their free and natural way until at least two years old, and if longer so much better for the durability of the animal. I may differ in this respect with some of the modern trainers and drivers, but agree with that great Napoleon of the trotting turf of his day, Hiram Woodruff. Neither is my theory antagonistic to the staying and lasting qualities in such "old time" trotters as Imported Messenger's greatest son — on the trotting turf — old Topgallant, whose first race was made at the age of fourteen years; or of Sherman Morgan's fastest trotting son, Ripton, who never stepped on a track until after he was five years old; or of the reigning queen of the trotting turf of her time, Flora Temple, whose first race was when in her sixth year, and who was a regular campaigner for eleven years; or of the wonderful horse of his day, Dutchman, who had few, if any, equals; he was on the trotting turf for many seasons, but first saw a race-track at the age of five years.

The gamy mare, Lady Suffolk, was on the turf for thirteen successive seasons, her first appearance before the public did not occur, however, until she was five years old.

Goldsmith Maid, the queen of all trotters in her day, and the first to lower the record to 2.14, was eight years old before making her first race, and remained constantly on the turf until about twenty-one years old.

Dexter, the trotting king of his day, and who for so long held the world's trotting record of $2.16\frac{3}{4}$, had never eaten a bushel of oats — it is said — at four years old, and never saw a race-track until six years of age, and lived to be thirty years old.

(See Old-time Trotters, Chap. XXVI.)

It is true that we are now living in a faster age and have more fast trotters and more trotting tracks than in those times, and consequently, cannot afford to wait so long for the development of our horses; but HOW LONG DO THE BEST RACERS OF THE PERIOD LAST?

As stated in "Breaking and Training" (Chap. XXVIII), I believe in commencing the education of all colts at an early age, and believe their teaching should be in harmony with the business afterwards expected of them; but to hammer the life out of the poor things when they are but mere babies, as is often done, seems to me to be both cruel and inhuman.

If, as in "Training for Speed" (see Chap. XXIX), the training can be slowly and carefully conducted, it may be commenced at a comparatively early period in the life of the youngster, who, if not pushed beyond his strength and capacity, may, in some respects, be advantageous.

Now as to managing the trotting horse at the track. Our old-school doctors and farriers used to consider it necessary to first bleed their patients for all the spare blood there was in them; all the early trainers and managers of trotters thought it necessary to first sweat, scrape, and physic the animals under their charge; but time has changed their views on those subjects, and doctors now first experiment with their patients and "bleed them" afterwards, and so modern trainers have changed their minds as to sweating, scraping, and physicing.

As to shoeing and properly balancing, much depends on the speed procured and the ease with which it is obtained. My views on shoeing may be found in full on page 319, Chapter XLI; but I will here remark that the nearer you imitate nature and the least possible weight with which you can balance the colt, you should carry.

As a rule, I would recommend the discarding of toe-weights altogether in training and managing horses on the track; still, their use may be admissible in some cases, as there are generally exceptions to all rules.

I would, however, recommend the training of the coming trotter to trot in light shoes, and not ask him to go at a faster gait at first than he could be made to trot level and square in that way of going, and then increase the speed gradually; but in this matter, as in so many others connected with the horse, there can be no definite, positive rules laid down to govern in

all cases. A grain of commonsense and practical good judgment to meet the emergencies of cases as they occur is often worth more than a pound of instruction by the wisest author.

Trainers are too apt, I think, to jump to the conclusion that colts and green trotters need weights, when the difficulties that present themselves could be easily removed without resorting to this artificial assistance. I agree with Trainer Marvin when he says: "I need not enter into any argument to show that the ideal trotter will trot barefooted, needing no balancing other than what nature has given it; and that the use of the shoe is simply to protect the foot, after which every ounce of weight has its detrimental influences. It may, however, become in some cases necessary; but the careful trainer should, in such cases, endeavor to reduce and never in any case increase weight until certain that nothing else will remedy the difficulty encountered. In case that you decide that it is best to put on weights and find that they remedy the trouble, do not for a moment think it will be always necessary to retain them; but, after a little while, commence gradually reducing it until you get down, if possible, to an eight or ten-ounce shoe."

If a horse is worked for speed at a rate that he can go fairly and squarely, going clean without weight or boot, his speed will naturally and gradually improve, and the final result will be much more satisfactory than if you had resorted to artificial appliances.

Keep your trotter going square; do not be too impatient if he inclines to hitch in his gait or to become generally unbalanced; take him back to a gait in which he can trot level and square by natural training before experimenting too much with his shoes. Other things being equal, the horse carrying the least weight will go fastest, stay better, and last longer than his weight-carrying rival.

As to "jogging," its only object is to prepare the horse to trot by emptying his stomach, limbering up his joints, warming up his blood, and getting his whole organization ready for ac-

tion. There is no real development of speed in jogging, but it is a simple preparatory service for the exhibition of speed.

At the commencement of the season if your horse is too fleshy as well as soft, the best way to relieve him of this superabundance of flesh is by the natural way of working it off, and not by sweat-blankets and hoods. I have but little use for either of them. Some horses will require much more work than others to accomplish this, but usually the more work the better horse; after you have got your horse in a good driving trim, with flesh of a hard variety, then, and not until then, he should be given the greater portion of his work in hard brushes, as fast as possible.

The principle of work for colts and mature horses is the same. To prepare a green horse for fast work, give plenty of exercise, careful grooming, and judicious feeding. Always in your work-outs work well within your horse's limits, and not overwork or over-tire and discourage him. With the fast mile and repeat business, as often practiced, your horse cannot but lose his speed to a great degree. On the day of the race you will want all the speed that you can command, and you should husband it well for that very purpose, as herein lies the success of all your past efforts.

Remember in training for races that "speed makes gameness." The horse going within his limit will always outlast the one required to do his very best from wire to wire. In preparing for the race you will soon learn to judge when the horse has had sufficient exercise, as he will show it by acting tired and losing his eagerness to go. At the first sign of this he should be taken to the stable.

Care of the mouth in training is an important thing. See that it does not get sore, that the bit is not hurting it; and endeavor, if possible, to keep it in its natural, sensitive, and easy state; very much depends on the condition of a horse's mouth at the time he is to enter a great race.

The best drivers are those who so skillfully handle the reins that the horse is not only steadied in his work, but also receives

a sort of electrical communication from the driver through the bit. Whenever a trainer or driver and his horse "get out" with each other, the sooner they part company the better for both; neither can do himself justice while fighting the other. Work to be of the greatest benefit in any kind must be entered into with good temper on both sides.

As to stabling the training horse while in training, the required requisites are plenty of room, good light and ventilation, and, if possible, have each box-stall independent of the others, and each one having its own door and window. The stables should be located on high and dry ground, and quite convenient to the track. I like a southern exposure best, and half-doors, not only for their being more pleasant, but also of affording more freedom to the animals, who often in fine weather like to stand with heads and necks protruding, taking an interest in whatever may be going on, and thereby undoubtedly enjoying life much better than if closely housed.

These stalls, as well as their occupants, should be kept perfectly clean and free from all bad odors. Feed and water the animals regularly three times a day, and with judgment at all times; watch and note the effect of food upon each individual and regulate the quantity and variety according to circumstances. Horses differ in the necessary amount of food needed as they differ in the amount of work required. Quality is a great essential in food for the race track. All food should be clean and free from dust, and the importance of good water is equal to that of good food.

On coming to the stable after the pupil has had his workout give him a few swallows of water, then remove the harness, throw on the blanket, keep him out of the draft, scrape him off lightly (but not overdo the matter), and watch him closely lest he take cold. Be careful not to use too heavy a blanket, as you do not want to sweat your horse, only to keep him from taking cold. If he is pretty well warmed up when coming to the stable, then, after the scrape, a body wash may be applied, composed as follows:

One and one-half gallons pure cider vinegar.
One quart full proof alcohol.
Six ounces arnica flowers.
Eight ounces salammoniac.
Four ounces saltpetre.
Rain water to make three gallons.

This should be quickly poured and rubbed over the loins and muscles of the shoulders; after which the legs are bandaged; then put on a light blanket; then walk him slowly for some twenty minutes, letting him stop occasionally; then, when he is nearly dry, take him and rub him out carefully and lightly. Hard rubbing a horse in racing condition is both irritable and painful.

To bandage the legs properly is quite a knack, and you should remember that the lower part of the ankle and heels needs the support furnished by the bandages just as much as any part of the leg; the object of the bandage is to brace the ankles and tendons until they are thoroughly rested after the strain of fast work. The bandage should be wrapped down and well under the fetlock; it should be put on moderately tight and left on from one to two hours.

As to cleaning tools, a soft bristle brush is preferable to stiff corn brushes, but the rub-cloths or towels, accompanied with plenty of elbow power, should do the principal work in cleaning the trotter.

The importance of having good rubbers and the difficulty of obtaining them confront every trainer. A good rubber or swipe will take the best care of three horses.

The feet of the young trotter and campaigner should at all times receive the best of care; they should be carefully cleaned and washed out and "stopped up" with clay every night while on the track. As a rule, I use no oil on the feet. For a wash I use the leg-wash previously recommended as a body wash also; rub this well in by the hand, along the joints and tendons; then bandage with a pliable or open bandage of porous texture, being careful that it is not too tight and thus in-

terfering with the circulation; it should not be left on more than ten hours, or the legs may become heated.

I have but little, if any, use for the soaking tub for the feet; a walk in the dewy grass in the summer is, to my notion, much better. Marvin says:

"It is well to learn to drive by the watch, provided you don't try to beat it; it improves a man's judgment of pace and hence teaches him to rate more evenly."

It is well enough to let time be your guide but not a competitor with your horse in training. In preparing for a race a trainer should not overwork his horse so as to dull his spirits and get him "track-sick." At every stage of preparation the trainer's judgment should come to his aid and guide him as to what to do, when to do, and how far to go. Just as horses differ so must the methods differ. In preparation for important races the jogging should not be left to the boys, but should be done by the trainer himself, as in this branch of the horse's education much is at stake, as mouth, gait, and temper are all directly involved. In order to be most successful, one hand should do all the driving; the horse will readily perceive the difference. Attention to details amounts to much, in this as in other branches of business. Marvin says: "The man who gets into the sulky after the horse is ready to work, drives him his mile and repeats and leaves all the rest to rubbers to do if they will, and how they will, may have an easy and pleasant position in this life but he won't break many records."

In the race be sure to have everything in readiness to the clanging of the judge's bell; don't let that rattle you in the least, even if it is your first race; keep cool and attend strictly to your business; always co-operate with the starter and endeavor to prevent delay in starting.

After receiving the word "Go," do the best you can to get to the front, and stay there, if your horse can do so within himself, but don't waste a fraction of speed, any more than is necessary to safely win, without the necessity of driving head and head finishes.

After the heat treat your horse as in his brushes of "work-outs" while in training. If he fails to scrape well, however, and seems unduly distressed, sprinkle him with tepid water from a watering-pot, then sponge him over. Sometimes cold water will do as well, and either will generally relieve him. In some rare cases it may be necessary to give some internal stimulants, — whisky is, perhaps, as good as anything, then, — although as a rule I do not approve of using any such stimulant.

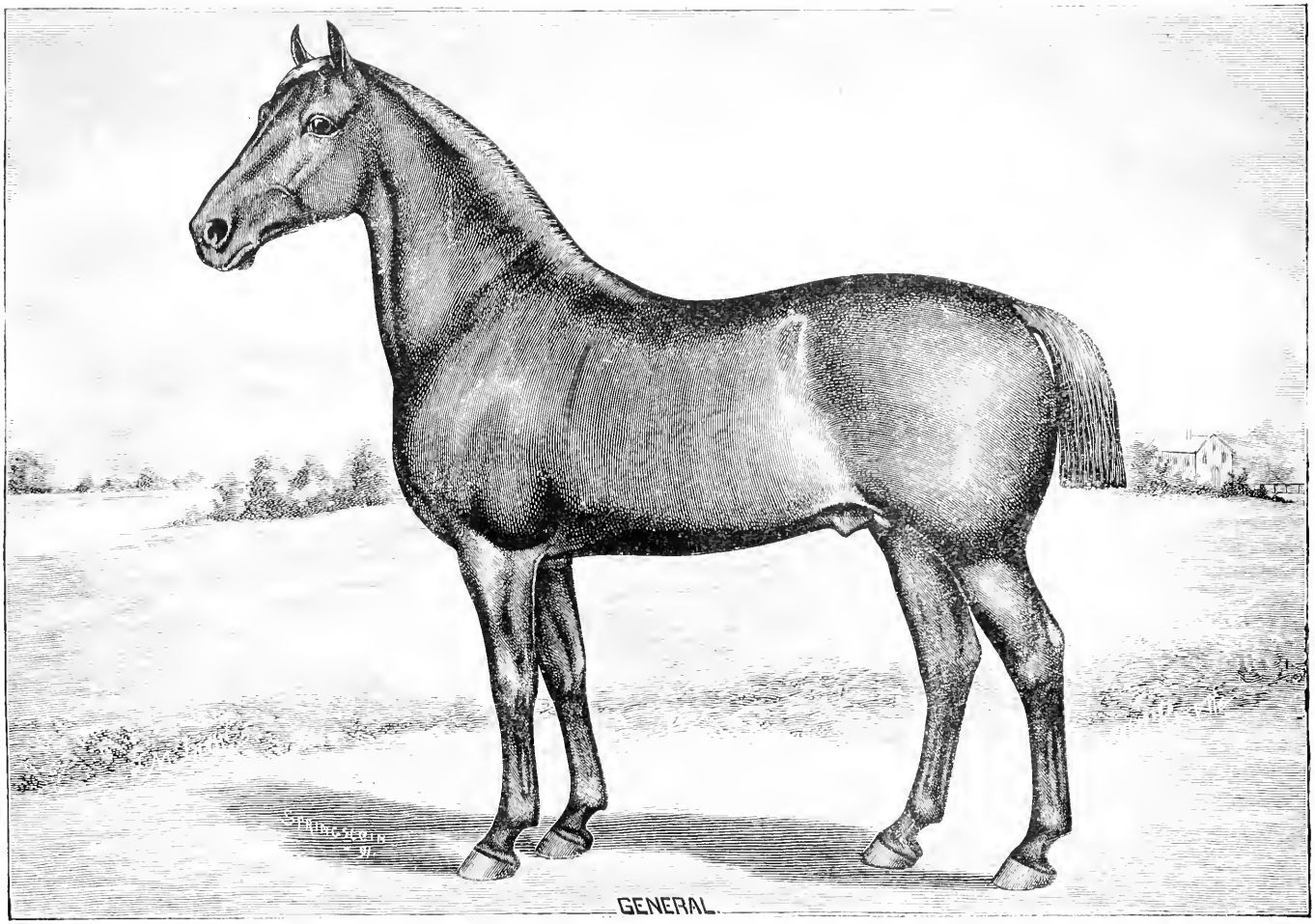
Between heats (after the second or third), feed your horse one or two quarts of good clean oats, as it cannot be expected that a hungry horse can trot and last through a long, hard race. He cannot trot on a full stomach but requires some nourishment to keep him strong and to prevent that gnawing, "all-gone" feeling at the stomach.

Make up your mind to win the race if possible; do so fairly without trickery or jockeying. Don't try to say smart things to the starter; give the judges no back talk.

It has been truthfully said that drivers are born, not made, and it is impossible to teach any man so that he can get up behind a horse and drive him successfully in a race, unless he has the natural gift for it.

A driver going out on a campaign with horses is not, by any means, on a pleasure excursion, if he should attend properly to his business. He should stay right with his horses, always remembering

> "The time to succeed is when others,
> Discouraged, show traces of tire;
> The battle is fought in the home-stretch
> And won 'twixt the flag and the wire."



FRENCH COACH HORSE, GENERAL (Imp.).
Owned by H. C. Farnum, Grosse Isle, Mich.

CHAPTER XXXVI.

BUYING AND SELLING HORSES.

Requisite qualifications — Location — Suavity — Expert on horses — Buying for the market — Showing sale horses — The coachman.

BEFORE deciding to engage in horse-dealing as a business my advice to any person is to first consider his qualifications for this business; in order to make this business a success one should have a special adaptation for it. As to the requisite qualifications of the successful dealer in horses, he should, first of all, fully understand the horse in all respects, and know just how to correct or humor his whims and to show him to the best possible advantage to his friends and customers. He should as fully understand the examination of the horse which he contemplates purchasing for his customers as the veterinary who examines and passes on the horses offered for cavalry service of a government or nation. He should be a good buyer, as a thing well bought is half sold; he should also be a good salesman; and I would say right here that to be a good salesman is perhaps one of the very best trades a man can possess. He must also understand human nature as well as horse nature; must at all times be pleasant and agreeable; always be ready to listen to a story and occasionally tell a good one, and should try to be an all-around good fellow, but not a drinking man nor a gambler. A man to be a successful dealer in horses must at all times carry a clear head on his shoulders, and in order to do this he cannot be a patron of a barroom or a saloon. Let your customer drink if he chooses, but you just keep perfectly sober at all times, and thus be always ready for business.

As to general trade or commerce, almost any little "Jew" can successfully deal in dry goods or ready-made clothing; it

don't require a college education to run a grocery store or meat market, or to successfully deal in other commodities, from brick and lime to watches and jewelry. It does not require an unusually smart man to be a lawyer, as lawyers run, especially if he is a natural liar and void of conscience.

To be a successful politician, chicanery and a free gift of gab seems to fill the bill. To be a minister of the gospel does not require an abundance of learning or of really business qualifications to be successful, as for instance, an illiterate man like Sam Jones can make a temporary success of this business almost equal to the better and more highly educated. As I have said, it don't require great talent to become a successful lawyer, politician, merchant, or minister; neither does it require great talent to become an ordinary or even a good mechanic; but when we come to the business of buying and selling horses we find that it tries a man for all he is worth; a business that cannot be successfully carried on by the ordinary business man, and a man to succeed must have a peculiar talent for this very business.

To be a successful dealer in horses as a permanent business, the first requirement is to fully understand the horse in all his moods and variations. Next, one must be a business man and attend strictly to his business and cater to the wants and demands of his customers. He should be a good buyer and a good salesman.

As regards location for this business, my observation and experience teaches me that it is better to locate at the selling instead of the buying end of the route. I know that each end has its advantages, but give me the money end in preference to the breeding, as a rule.

Dealing in live stock, other than horses, absorbs much vitality from a successful salesman, with close competition; also calls for more or less exposure and fatigue; but it requires far less skill, good judgment, and shrewdness to handle sheep, cattle, or swine than it does horses. When a man has the ability to handle horses there is no doubt more pleasure and

many times more chance for large profits than in the case of handling other stock.

The dealer, if not already possessed of the required amount, should cultivate suavity; it will be found a highly essential qualification, not only to the horse dealer, but to all other dealers; it helps in a great degree to sell his goods.

A horse dealer should be able to carry form, color, and size in his eye to the extent of matching a horse in Boston with one in Chicago, or a horse in Philadelphia with one in San Francisco, if necessary. There are times when good money may be made by buying good horses singly, matching them closely, and selling in pairs to people well able to buy them and pay good prices for them.

Honesty, truthfulness, and square dealing is just as necessary to success in horse dealing as in any other business; and the man who departs from this method of dealing with his customers cannot expect to retain them or to long prosper in the business.

To be excessively sharp or tricky may work for once, but cannot be successfully repeated in the same locality. It has been said "one may fool all of the people some of the time, some of the people all of the time, but not all of the people all the time." This was applied to politics, but may be applied to business as well, and horse business in particular.

The buyer of horses for the purpose of selling again at a profit cannot be too shrewd, observant, or particular; he should have the eye of the eagle, coupled with good horse knowledge and much experience in the business. His success will depend more on his eyes than his ears when making purchases. There are so many things about a horse that do not show on the surface and that require almost superhuman knowledge to detect, that it places this business of horse buying — whether for the market or for individual use — among the most scientific branches of trade in which man may become engaged.

Having received — whether worthy or not — the title of

"expert on horses," I will give my readers my rules for judging horses in buying. First, after a general casual look-over of the animal under consideration, I commence as does a good builder — builder of wells excepted — at the bottom; first of all I examine the feet, especially the front feet. The old saying is — and there never was a truer — "No foot, no horse." I insist on a sound foot, or at least one closely approximating that of soundness. An otherwise good horse need not be discarded for a temporary ailment, however, such as thrush, for instance, that can readily be cured.

When I have passed on the foot I then proceed upwards on the legs, examining each one separately, running my hand the entire length and feeling for splints, puffs, or anything liable to terminate in lameness or to be detrimental when selling on a competitive market. When examining the legs and joints I look sharply for curbs, spavins, and thoroughpins on the hind legs and for splints, weak or sprung knees on the front, or a tendency to either of the above on all places where liable to occur. When examining a horse for spavin the best position for it is a "squatting" one in front, where you can see alike the inside of both hock joints at the same time.

After thoroughly convincing myself that the underpinning is all right, my next move is to critically examine the eyes; these have been, in the human family, termed the windows of the soul; if horses have no souls, still these eyes are the means by which they connect themselves with the outer world, and it is a matter of great importance that such windows be not darkened.

I like a good, bright, hazel eye, but, as this is not very common among horses, then give me a lively, pleasant eye of another shade, with not too much white around the edges. I would much rather find white than red, however, as I never was partial to red-eyed horses or green-eyed dogs.

To a natural horseman, well up in his business, very much of the character and disposition of a horse may be determined from his eyes; yet it would be a difficult matter for any in-

structor to give his pupils any definite rules to follow in this particular branch of character reading. If not already inherent, such knowledge can be gained only by experience and observation.

After I have examined the eye, I next consult the mouth as to the age and general condition of the teeth. I look at the tongue to see if it has at any time been severely lacerated with the bit, and to determine whether the ligaments holding it in place have been strained, as is sometimes the case, causing the animal to carry his tongue out of the mouth in a lolling position.

On raising the mane I like to see a good, long curl or rosette on the neck, but this is not essential — only a matter of taste; yet it quite frequently helps, by many dollars, the sale of a horse.

Examine the nose for heaves, poor wind, or difficult breathing from any cause; the nose is a great indicator to those who properly understand its teachings.

See the horse driven in harness; stand behind him, in front of him, and let him pass by you, thus viewing him from all sides in his movements. Immediately after being stopped examine his breathing and the inflation of the nostril and movement of the flanks; pinch him on the back over the kidneys to see if he flinches there, which, if he is weak in the back or wrong in the kidneys, he is quite liable to do.

Lift the tail to ascertain the stiffness of the dock, remembering that as a rule a very limber dock indicates lack of stamina. Examine closely and thoroughly in the harness and out, on the walk and on the trot, standing still as well as moving; back him and watch the effect. If he "passes muster" in all of these trials, and you are satisfied with him and can purchase at a fair price, it is generally safe to do so. Even then, as you become better acquainted with your animal, he may surprise you with the developing of some disease or some trick for which you were not looking, and which you were by no means curious to meet; for, after the most expert horse-buyer has seen all

that was visible from the outside, he has not yet seen all those hidden internal mysteries which will sometimes raise havoc with the animal he purchases.

I once knew a man who had three sons, of whom he said: "I intend James for a lawyer and William for a manufacturer; but as to John, I don't believe he will ever amount to more than a first-class horse jockey." He evidently failed to see that a first-class horse jockey needed to possess more brains than either the lawyer or manufacturer, or both combined.

Look for brains and a level head as well as feet, limbs, and body when buying a horse. An animal may be "as sound as a Spanish milled dollar" and as "handsome as a picture," but if he lacks a level head he is never a safe horse to use at anything, and seldom of value for any purpose. Nearly as much variety as regards common-sense exists among horses as in the human family.

SHOWING SALE HORSES.

In successful horse-dealing very much depends upon the manner in which the goods are shown to the prospective customer. As there is so much difference in horses and the requirements of them so varied, there can be no definite rules laid down in this matter. I can, however, give a short code of general rules that may be safely adhered to.

In showing small and medium-sized horses in harness, the seller should be provided with a good new, or nearly new, well-fitting harness. If the animal be of a light color, such as gray, white, or cream, the harness should be trimmed with black. For a black or dark-colored horse the harness may have nickel or white metal trimmings. For heavy horses intended for express business or teaming, when shown singly, have the harness to compare with the horse in size, well fitting, and usually trimmed with brass, well polished. As to a vehicle in which to show driving horses, have a light, well-made road wagon, suitable for two persons to ride in, hung quite low with medium low wheels, painted black, kept well varnished, and as clean as

PROPERTY OF SCHWENK
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

possible. Always carry a good buggy whip, but be very careful in its use; just let your horse know that you have it.

Before showing your sale horses have them properly trained; do not wait until the time comes to show the goods before getting them ready for inspection. Some horses show best with open bridle, others the reverse, consequently have both kinds. In exhibiting your animal be careful not to ask him to do anything out of the usual routine unless you are quite sure he is capable of performing it to your satisfaction — unless, indeed, your customer especially desires you so to do. Never strike him with a whip unless you are quite sure how he will take it.

I once knew a horse-dealer who, when showing a fine pair of Vermont blacks to a customer in New York city who was riding with him, overdid himself in the following manner. The trade was virtually accomplished; the animals had shown off to the satisfaction of the customer, when the dealer, fool-like, must give one of the animals a sharp cut with the whip — a performance wholly uncalled for, and which was responded to with raised heels that flew through the dasher. The bargain was immediately declared off, much to the disappointment of the dealer, who was about to realize some $500 profit on the transaction.

Large horses intended for teaming purposes often show to the best advantage in new, well-fitting team harness, especially so when sold in pairs. When selling for speed, and having a suitable place to show your animal's true gait, of course you want him so hitched and driven as to appear at the best possible advantage, without making him a walking, trotting, pacing, or running advertisement for any emporium of race-horse appliances.

Many times after a dealer has succeeded in pleasing a wealthy customer with a fine coach team or a good and safe family horse, he then has that ever dreaded obstacle, the "coachman," to overcome. In many cases, unless he is first bought, and that at an exorbitant price, the sale cannot be

consummated; for, if the sale is made without the full endorsement and approval of this important functionary, the horses will almost invariably go wrong in some way and the deal will be upset. It is the coachman who has the full charge of them, and he can easily make it appear to his employer and to his employer's family that the horse or team does or does not suit them.

In many cases the dealer will find this functionary of such a grasping and penurious disposition as to require from fifty to one hundred dollars. In some cases I have known them to demand more than that ere his permission for his employer to make the purchase could be obtained, but when this matter is once amicably settled with the coachman he at once becomes a powerful auxiliary in making the sale and also in making it a permanent and satisfactory purchase to his employer, no matter whether the animals are quite all right or not.

It is always seen by the shrewd dealer — this great necessity of being in the good graces of the coachman, as on him alone, in many cases, hangs the possibility of a sale. Of course this $50 or $100, or whatever the coachman's fees, as it is called, may amount to, necessarily comes out of the purchaser, as, with the present competition in trade, no dealer can afford to take this sum out of his profits. Consequently the dealer in fine goods of this description is forced by circumstances to fix his price at such a sum above what he would otherwise be willing to sell them in order to meet the above contingencies of trade.

CHAPTER XXXVII.

SWAPPING HORSES AND HORSE JOCKEY TRICKS.

Author's experience in trade — Brighton Market — Swapping with a minister — Putting off for slight faults — My neighbor's horse trade — Getting a fifty one.

WHEN quite a young man, having much confidence in my own knowledge of horses and in my ability to handle them, and always having a great love for them, I conceived the idea of "turning an honest penny" by engaging in the risky and somewhat uncertain business of "swapping" horses.

I expect that if in my first trade I had been swindled out of my horse entirely it would have been the best thing for me, but, perhaps unluckily for me, my first four or five trades were quite successful. I then thought myself on the sure road to prosperity, especially so if I could bring my conscience to a point wherein I could exaggerate just a little on the qualities and value of my stock in trade.

Of course I took it for granted that whatever others told me of their horses could be relied upon; I did not suppose people would lie in a horse-trade any more than in any other business transaction, and right here is where I got badly left; for now, after forty years in business of different kinds, I find many whose word is not worth a picayune in trade when a lie will make them a dollar, more or less; yet I believe a man will sooner lie in a horse-trade than any other. Why is this? Is there or should there be anything demoralizing about horses or horse-dealing?

It has been said of all animals from man down to the lowest, a woman and a horse are the most deceiving. Not knowing as much about women as horses I cannot exactly decide in

this matter, but that there is much deception in the horse, and that even the best judges and smartest dealers are sometimes liable to be deceived and cheated in a horse-trade, I do know.

Once, many years ago, I swapped horses with a minister, whose excuse in wishing to make this trade was that his horse, weighing some 1,100 or 1,200 pounds, was too heavy for him, and as I had a compact Morgan-built chunk of about 900 pounds in weight, he liked him much better. He guaranteed his horse "sound as the Rock of Ages" so far as he knew; of course he would not warrant him because he was not a horse man or a dealer; he did not, of course, know what would happen to the horse afterwards, but at that time he believed him to be absolutely sound. After the trade was made and the goods had changed hands, I found that his horse had a slight spavin coming on, and so slight as to be scarcely noticed, only on closest examination, yet enough to lame him after a hard drive.

On sending a delegate to interview the minister concerning his horse trade and who pretended that he knew the minister must necessarily be cheated in trading with a horse man and a dealer, the good soul got cleverly out of it by saying that he should not have made the trade only that he knew that his horse had a spavin coming and would soon be so lame as to be useless to him.

It is frequently the case when one, having a horse that does not suit him in every particular, feels inclined to "swap" or trade him off for something different, as for instance: one has a good horse, sound, kind, and all right but when turned out in the field is very hard to catch, so much so that the owner resolves not to be bothered with him, but trade him off for one that is good to catch, but comparatively good for nothing when caught.

Another has a horse that is all right except that he pulls a little hard on the bit, so he swaps him for one that does not pull on the bit but requires to be pushed with the whip, instead, in order to get anywhere with him.

A third has a good horse with the exception that he is unwilling to stand while he gets into the buggy, so he, becoming disgusted with him, trades him off for one that is quite willing to stand while he gets in and gets well fixed, but is unwilling to start when he is all ready to go.

Another has a very good horse, he says, but which does not quite suit because it paws in the stable, and failing to cure it of that habit he swaps for one that is perfectly quiet in the stable, and for that matter is very quiet in all other places and especially so when wanted to be otherwise.

Another has an excellent mare, he claims, only "she has a touch of the heaves," and requires her food to be moistened every time, for if fed to her in a dry condition she will cough and otherwise show signs of distress; so he swaps her off for one that has no heaves, but the second or third night he has her she knocks the side of his barn off during a fit.

And yet another has a beautiful gray mare all right in every particular, only that when she sheds her coat in the spring for the matter of two or three weeks he gets covered with white hairs and he don't like it, and declares he will get rid of her before another shedding time comes; so he swaps her for a "dark horse" that not only sheds just as many hairs on his owner's coat, but of color that does not show just as plainly, and proves himself a veritable "dark horse" in many ways.

How often have I known a good horse traded for one not worth half as much as the one traded, just to get rid of one fault, and how often have I seen the man who made such a trade so sick of his bargain as to be really miserable for weeks.

Many years ago I made up my mind that perfection in a horse has not nor never will be attained, whatever may have been preached or written to the contrary. When you show me a perfect horse (or a perfect man, even), then I will probably confess that I know but little about horses or men.

I do not wish to be understood to advise against horse-trading or horse-dealing but simply to warn the general farmer or

horse owner from rushing into the horse-swapping business merely because he happens to have a horse with but a single fault; as in so doing he often comes in contact with such men as we would, on after-thought, rather not have met; men (such as Bill Nye once said of the heathen Chinee), "whose ways are peculiar."

To better illustrate my views in this matter, I will give you some of my own experience in the matter of dealing with such characters. I suppose I could write quite a book embracing all of my experiences, together with those of my neighbors and friends which have come directly under my observation, but the few following cases must suffice.

I once bought a chestnut mare at auction in the Brighton market; she was eight years old, and in foal. She had her tail braided and done up in shipping style, in the same way that horse-dealers manage the tails of their best horses when shipping them to eastern markets, to prevent rubbing and injury to their appearance.

The young man in charge of this mare showed her in harness, and demonstrated her kindness and especially her disposition as to kicking by crawling from the express wagon to which she was hitched out on her back, and by sliding himself down between the cross-piece of the shaft and her heels, etc., etc. The jockey's story was this: A northern dealer had brought into Boston a car-load of good horses, and as this mare, although one of the best in the lot, had shown to be in foal, she was left over when the others were sold, and as the dealer could not afford to remain in Boston with one horse, and could not afford the expense of shipping a single one back to Vermont, he had placed her in the hands of this clever, honest young man to sell for whatever he could get, while he, himself, set his face toward the north star in order to procure another car-load.

Now, as this nice young man was no horse jockey or regular dealer, and his instructions were to get rid of the mare for the most money she would bring, and at the least possible expense,

and as the people of Boston would have no use for a mare in foal, he had thought his best chance of securing a customer lay among the farmers, who were better situated to raise a fine Vermont-bred colt than any other customer whom he might be able to strike. Consequently, he considered his best plan to lie in taking her over to the Brighton Cattle Market on market day when many farmers and live-stock dealers from all over that section of the country would be there, and have her sold at auction to the highest bidder for cash. The sale, being a public one, would leave no ground for complaint from the owner that he had not acted honestly in the transaction. Honesty and a good name was what this young man claimed to possess and he could not well afford to do anything disreputable whereby the public faith in him might be shaken.

Well, the final result of this whole transaction was that he sold that $200 or $300 mare for a regular low-down *stealing* price, for a price, as the honest auctioneer remarked at the time, that one could much better afford to pay than to run the risk incident upon stealing her, — and *I* was the lucky (?) purchaser. Only think of it! I had procured a $200 Vermont Morgan mare (some of the party claimed her to be worth $300), with foal by old Daniel Lambert himself, for about one-quarter of her actual value.

"Very well," I soliloquized, "this bargain will offset several poor trades made by being duped and lied to by regular horse-jockeys, with whom I had really no business to deal."

On taking the mare home to my stable, I told my two small boys who were in the barn at the time, that I would show them a beautiful kinkly tail, as it had been done up so long it must necessarily be kinkled and curled to a very high degree, and I at once proceeded to untie it. I cut and took off string after string, also a lot of burlap, and finally the tail itself came off also; *i. e.* the false tail, leaving a stub some six or eight inches in length — long enough to "tie to," however.

Never, perhaps, in any after development of a horse trade have I received so great a shock as when I had cut the last

string and Emma's tail came off with it. The situation dawned on my mind at once. I had secured a "rein hugger" and a kicker, and undoubtedly one standing at the head of her class at that. Further developments demonstrated to me that she was subject to kicking fits, and when attacked by one of these would make kindling wood of anything coming in contact with her heels.

She reduced a nice, stout express wagon into a sorry looking vehicle for me, and if, with plenty of help, I had not been able to disconnect her from it, I doubt if the wheels even would have been left.

I once traded for a pair of gray Canadian ponies, colored and marked exactly alike, and of which, from their close resemblance to each other, I was quite proud. They were a beautiful dappled gray in color, with black manes, and the upper part of their tails — about half — was black and the balance milk white. They were very showy for ponies and quite stylish, but after I had owned them for a short time, while the color of one remained intact, I found that the other had been colored somewhat to match her mate, as her mane and tail soon became all white and most of her dapple disappeared.

I once bought a gray mare in Brighton — a Messenger (?) mare, from a farmer's son, coming from one of the rural districts of Massachusetts. He had, he said, driven in from home that morning, a distance of about eighteen miles, with two horses mainly for the purpose of selling one of them, as they had three altogether and were not situated to winter more than two. It was then in the fall; he said they had needed three during a part of the season, and especially during the haying season, but now that the work was over they desired very much to dispose of one horse, more especially so because of the shortage of their recent crop.

His outfit consisted of a brown horse eight or nine years old of about 1,200 pounds, and a gray mare of seven years old "as pretty as a picture," but weighing only about 900 pounds. He had them tied to his wagon on the street eating hay from the

wagon that he had brought from home to feed them with and thus save expense. He was a very honest appearing lad of seventeen or eighteen summers and almost as many winters. He said they wanted to sell so bad that his father had told him to sell the one that would sell the best, but for some reasons they would rather keep the gray mare, as she was a great roadster and very highly bred, in case they should conclude to raise a colt. On the other hand, as they had quite a lot of cordwood to haul to market the next winter, the horse would be worth the most for that purpose, and at the same time the horse mated the one left at home better than the mare did; although the mare would pull her part with any of them.

This farmer's son was one of the most honest appearing lads I have ever talked with, and to help him out I purchased the gray mare, and I thought the best way to get her home — some forty miles — was to drive her; so after paying for her I started out to purchase a cheap vehicle and harness for that purpose. When I had got my outfit complete I found that the mare was tied to the fence and the boy and the other horse was gone. I at once harnessed and hitched my purchase to a second-hand tilbury, but with all the coaxing and persuading I was master of, and with the assistance of friends, she could not be induced to pull an empty and light vehicle of two wheels a rod. In order to help me out of my dilemma there were plenty of kind people about who expressed their willingness to help me out by letting me have something that I could drive, the result being that I traded with an Irish horse-jockey, and got a fine roan mare that I knew would draw a wagon as I had ridden after and driven her in one before making the exchange and paying my boot money.

This mare I took home, and on examination I found a small cord about the size of a fish-line tied so tightly around the top of her head, at the base of the ears, as to have cut nearly its bigness into the flesh. When this was taken off and after healing up the sore and giving her a two-weeks rest, I found her so completely useless and a chronic balker that I concluded to

breed her, and after getting her safely in foal to sell or trade her off as a brood mare and not as a general purpose horse. As I lived on Prudence Island, R. I., at the time, I started for Newport with my mare for the purpose of breeding her. While on the Newport steamer I met a horse-jockey who seemed much interested in my mare and after learning of my intention of breeding her, revealed the fact that he was the owner of a fine blood bay Morgan mare much more suitable for the purpose of a brood mare than was mine, and said he would give me a good trade for mine. Consequently, as I had no fear of being cheated in any trade that I could make with this mare, provided I gave no boot, I swapped with him even for a beautiful bay mare which was out to grass, and had not been harnessed for some time although sound and all right, and notwithstanding it was in the busy season of gay Newport when the services of almost every animal on the island were called into demand.

This mare had a docked tail, and as it was past the time when docked tails were fashionable I naturally inquired as to the cause, and was told by her honest (?) owner just why she came to be docked.

He said: "You see it was just this way; she was owned by a farmer on the island who was of a hasty and nervous disposition, and one day when mowing with her — on one of those days when the flies will torment a horse almost beyond endurance — this mare in fighting flies with her tail accidentally caught the rein and was so frightened on the account that she kicked just once; this so surprised and irritated her owner that he had her bereft of her beautiful tail at once and was so exasperated with her that he got rid of her as soon as practicable."

This mare, given a fair trial, proved herself a high kicker when in the mood, but to her credit I will say there were times when she worked very satisfactorily, and furthermore, while in my hands she did lots of it.

Once while buying cattle in the Brighton market my atten-

tion was called to a beautiful dark chestnut mare, and being in hands of parties unable to hold her she was about to be sold at auction for whatever she would bring. Her pedigree was well established and would be furnished the buyer as soon as it could be obtained from the breeder. At the sale she showed well in harness; I bought her; she was drugged to death and died that night.

I once bought a horse at auction in Brighton, a very smooth and pretty bay horse of the Ethan Allen type, absolutely sound in wind and limb, "not a pimple on him," smooth as a mole, handsome and stylish, so far as appearances went. I obtained him at a very low price. He proved to have a cancer on the penis and lived but a short time.

I once had a tenant on a farm of mine that had a horse that was all right and suited him in every respect save one, and that one fault was in not standing for him to shut the lane gate near the house on his return home after having driven him out; he would stand all right going from home, but on his return was so anxious to get to the barn that he would not allow his master time to shut and fasten the gate.

He, consequently, swapped him for one that he could not use with safety anywhere, and was obliged to make a second trade. The second time he got a horse that not only would stand for him to shut the gate, but would stand whenever he felt in the mood, and no amount of whipping or coaxing would make him do other than stand.

I once sold to a neighbor of mine in Connecticut a pair of coal black Canadian horses for $500. They were a good pair, young, sound, and all right, and worked together. One of them was of a more nervous disposition than the other, and consequently rather the better horse of the two, especially so as a single driver on the road. This sale was made in the spring, and after haying that summer their owner told me he was well suited with them, and that they were the best team he had ever owned, but some time during August of that season, while out driving the nervous one, he was suddenly over-

taken by one of those terrible New England thunder storms, and in this case the thunder was most terrific and the lightning almost incessant. The result was his horse became very nervous, and much excited, and tried to run; and as he was driving with one hand and carrying an umbrella in the other, he dropped the umbrella in order to have both hands to manage the horse. The umbrella had a crooked handle, and this crook caught somewhere either around the shaft or some other place and drew along on the ground beside the horse, which frightened him still more, and as he could not run he resorted to the alternative of kicking. He only kicked once, but that once was enough to frighten his owner to the extent of never wishing to use him any more. Consequently he was ready to "swap."

Well, it so happened that a neighbor of his, and living on a farm adjoining his, but on another road, had a very old black horse which, on account of his age, he did not care to winter, although he had been a good one and was about the size and much the same build as the pair mentioned — he being a Canadian, also. Well, the old black horse was disposed of and his place filled by a younger horse, and one day a stranger came to the farmhouse of the gentleman owning the pair and driving a fine-looking black horse. He said that he had heard that the proprietor of the place had a dangerous, vicious, and unruly horse to dispose of, and that he wished to match a good one of a black color. He had the goods with him to do it with.

After thoroughly trying the stranger's horse, both double and single, it was decided that he was perfectly safe in all harness, and there was no doubt that he was the horse wanted to fill the place of that terrible runner and kicker. The stranger asked $200 to boot, but finally the deal was consummated by my neighbor giving the stranger his horse and a check for $150. A short time after this trade a local horse jockey called on my neighbor of the pair, saying that he had heard that a mate had been obtained for his favorite horse, and being shown the new

acquisition, exclaimed: "Why, that is the old ——— horse; didn't you know him? Well, you ought to, for he has been owned on the next farm to you for upwards of twenty years!"

On being thoroughly convinced that this was the case, the old horse was again for sale, and found the same purchaser again at the same price — $10 — only in this case the price paid was in barter and amounted to $12, while in the first instance it was $10 in cash.

I once had an old friend (who was also a relative by marriage) who, for a farmer, was quite a trader in live stock and used to enjoy trading horses. While not an expert in this line, he was a pretty good judge of such animals, had good natural ability, and understood himself pretty well. Consequently, I think he about held his own in the horse department of his business. I remember, when visiting him on one occasion, of his telling me of several quite smart and shrewd, as well as profitable, horse trades made by himself; whereupon I remarked that I should suppose after making so many good trades he would be able to build a new barn on his farm, as I knew he needed one sadly, and I had often heard him express a desire to have one, but claimed that he was unable, financially, to build.

"Well, John," says the old man, "I have been telling you of the good trades only, as they are all I care to remember."

I once "swapped" off a horse because he was too slow for me. I traded with a jockey, and got one that proved to be as much too fast as the other was too slow, inasmuch as I had not owned her more than a week before she, in a running fit, took me over my fields on a hay-rake much faster than I cared to travel.

Of course I was then ready to trade with another jockey for a slower one. The fools were not all dead then — neither do I believe they are now, for that matter. When I had been swindled the worst and felt the most like giving up trying to have anything more to do with horse trading, there was usually some "smart Aleck" ready to come forward and relieve me of that which was causing me to feel so blue.

CHAPTER XXXVIII.

DENTITION AND AGE AS SHOWN BY THE TEETH, ETC.

Description of teeth at different ages — Number of a full set — Classes — Bishoping — Explanatory cuts — Shedding — Full mouth — General signs of old age — Comparative age of man and horse — Great age of horses — Zoölogists' claim.

THE teeth of the horse are developed within their appropriate cavities or sockets, which are found exactly corresponding with their number in the upper and lower jaws, being narrower in the lower than in the upper.

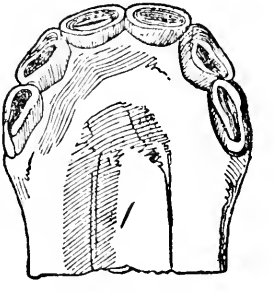
At birth they are in a state of incomplete growth, covered and concealed by the gums, but soon afterwards they cut their way through the gums in pairs, the first set, or milk teeth, being in course of time superseded by the permanent teeth, as in all the mammalia.

The complete dentition of the horse comprise forty teeth, divided into three classes, *viz.:* Incisors, Canine, and Molar. The incisors, or front teeth, comprise twelve, six upper and six under; the canine, or bridle teeth, four, two each upper and lower; while the molars, or jaw teeth, consist of twenty-four, twelve on each upper and lower jaw. Each tooth is developed within its corresponding cavity in the jaw, and is composed of three distinct substances — cement, enamel, and dentine.

The *cement* of the horse's teeth closely corresponds in texture with his bone, and, like it, is traversed by vascular canals. The *enamel* is the hardest constituent of the tooth, and consists of earthy matter. *Dentine* also contains earthly particles, which are partially blended with animal matter and partially contained in a granular state within its cells.

In horse parlance, the incisors, or front teeth, are called *nippers*, the canine teeth *tushes*, and the molars *grinders*.

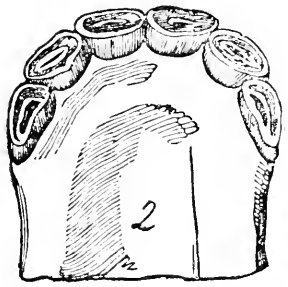
To be able to determine the age of a horse within a few months during the period of his greatest usefulness is an object of much interest to every one dealing in them. To be an expert in this matter is of great importance to the successful purchaser. Many a man has been the victim of unprincipled jockeys, and has purchased a "doctored" old horse, almost worthless, for a splendid young animal; and thus has he not only been swindled out of his money, but laughed at by his neighbors only for his ignorance of a few simple points to be observed to enable any man of common-sense to tell the age of a horse with approximate certainty. In treating of this subject it will be necessary to describe the successive change the mouth undergoes up to the age at which the changes become obscure and uncertain, which, quite fortunately, is beyond the period of his highest value and usefulness. Ignoring the cutting and changes in the teeth of the foal during its first year, as such cannot interfere with its commercial value, we will describe the mouth of the colt at one year. See Cut No. 1.



The four middle teeth have now become level with each other, and the third pair, or corner ones, are approaching the level of the others. They will be found to present, respectively, the following appearance: In the front pair, or two middle teeth, the center *mark* is worn, becoming somewhat dim, but broad and regular, with a ring of enamel of regular width, but thicker in front than behind, surrounding it. This mark is partially worn out of the next two, or second pair, but is darker, longer, and narrower than in the first, and the ring of enamel surrounding it is not quite so regular. In the corner teeth the mark is of full depth, darker, longer, and narrower than in either of the others, the ring of enamel being heavier and more irregular.

At this time another pair of grinders in each jaw make their appearance, thus making four in each jaw on each side, or sixteen altogether.

At the age of two years (see Cut No. 2) the middle pair are quite smooth, and the next pair present very nearly the same marks the first did at one year old; the corner ones having a faint mark. About this time also a fifth pair of grinders in each jaw make their appearance.



In the spring, before the colt arrives at three years of age, he will shed the front pair of nippers in each jaw. The gum will have the appearance of receding, and very soon the old tooth will be absorbed and the new tooth will appear in its place as if it had poked the old one out. This is called the three-years-old mouth. (See Figure 3.) The two middle nippers not grown to their full length. The upper pair of front nippers are usually cast first. While these new teeth are growing the colt sometime experiences some difficulty in obtaining sufficient food by grazing, and if so he should be fed grain.

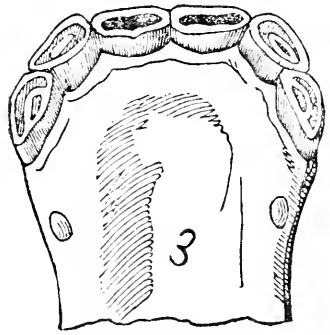
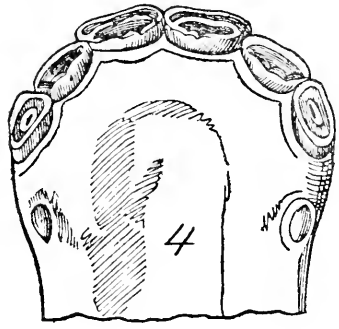


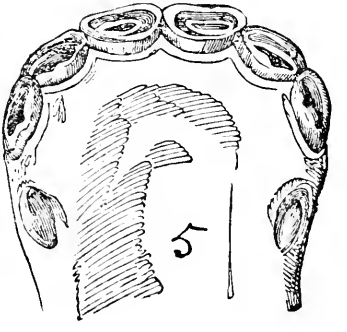
Figure 4 represents the four-year-old mouth. The center nippers are now fully grown. The front edges, which were sharp, are somewhat blunted, the mark in them becoming short and narrow. The next pair are now full grown, but smaller than the middle or corner ones. The corner ones are smaller than



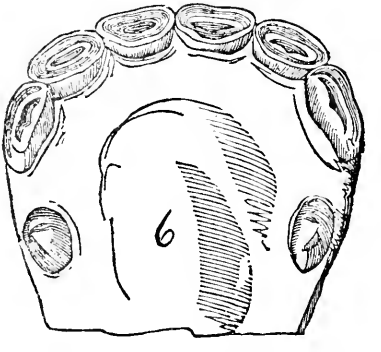
when first matured, and have the marks almost worn out. As with the others, a change next takes place in the corner nippers.

At four and a half, or between four and five, they begin to strip, and are soon replaced by their successors. At this period also the animal starts his tushes. They come up between the nippers and grinders, rather nearer the former than the latter, but the distance increases as the jaw grows, which continues until seven.

At five, the mouth being full, the nippers all set, the four tushes from three to five months old, the colt becomes a horse, and at the same age the filly a mare, her mouth passing through the same changes except as regards the tushes, which, in many cases, do not appear at all, while in others appear only small. Cut No. 5 shows the five-year-old mouth, which is called the full mouth.

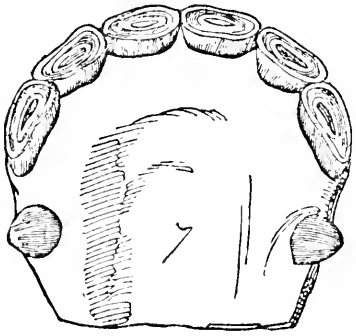


Cut No. 6 represents the six-year-old mouth, with the mark entirely gone in the front pair of nippers. There still remains, however, a slight depression in the cement filling of the center, and this is, of course, surrounded by enamel. This depression is of a dark or brown color. Outside of this ring of enamel the bony substance is also worn below the level of the enamel, and also presents a stained or brown appearance. The second pair are approaching the appearance of the first, the mark being short, broad, and faint; the corner ones show evident signs of wear.

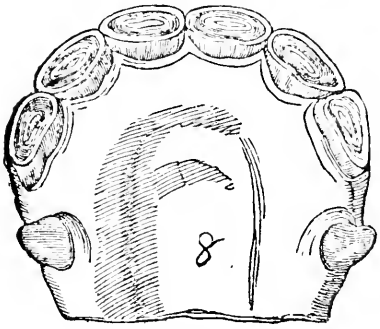


The tushes have reached their full growth; the third pair of grinders are of their full length, and all the grinders are level.

Cut No. 7 represents the mouth at seven years old. The mark has disappeared from the four inner teeth, and very nearly from the corner ones, the second pair showing about the appearance the first pair did at six, while the latter will be much more worn. The tushes also begin to show marks of wear, being rounded at the point, still rounded outside and at the edges, and becoming so on the inside.



Cut No. 8 shows the eight-year-old mouth, with the mark gone from all the nippers below, which, indeed is generally the case some time previous to his attaining the full age of eight years. The tushes are now rounded in every way.



Bishoping is sometimes practiced by jockeys, who thereby give the mouth a counterfeit appearance to enhance the animal's value.

To accomplish this the horse is cast, and a hole is punched or bored in the two corner teeth resembling the depression in the seven-year-old's teeth. This is then burned with a hot iron, which imparts a dark stain. The second two are also slightly stamped and touched with the iron. This fraud may be easily detected by the appearance of the teeth in the upper jaw, which the buyer should always examine.

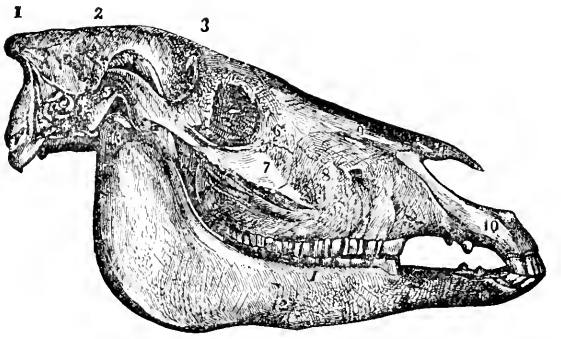
The upper nippers retain the marks three or four years longer than the lower.

The name "*Bishoping*" is derived from the rascal who invented it.

At nine the mark will be worn out of the middle pair of upper incisors, and they will have the appearance of the lower ones as described at six.

At ten the second pair of upper nippers will have the mark worn out of them, presenting the appearance of the lower jaw at seven.

At eleven the upper corner cutters will have the mark worn



PROFILE VIEW OF THE HEAD AND FACE.

1. Occiput.
2. Parietal bone.
3. Frontal bone
4. Petrous portion of temporal bone.
5. Zygomatic arch
6. Lachrymal bone.
7. Malar bone
8. Posterior maxillary bone.
9—11. Nasal bone.
10. Anterior maxillary bone.
11. Temporal fossa.
12, 13. Lower jaw.

THE BONES OF THE FACE, including the lower jaw

out, and the upper jaw will correspond to appearance of lower at eight.

After the disappearance of the marks the best and almost only means of information concerning age are the indications presented by the wear and tear, and these can only furnish approximate certainty.

After nine years it is somewhat difficult to determine the exact age of the horse from his teeth, which generally grow in length and are more in a line with the jaw. A strong pre-

sumption of the horse's age may be drawn from the appearance of the roots of the teeth. The enamel extends but a little below the gum. The front teeth of some aged horses wear down quite close to the gums, while those of others grow long and in some cases require cutting off to enable the grinders or molar teeth to come together to perform their mission.

Those horses running to grass in summer, using their nippers to gather their food, usually have much shorter nippers or front teeth than those kept up to hay and grain during the whole time.

Aside from the teeth there are indications of age of a general character deserving especial notice, such as the general expression of the horse, the deepening of the hollows over the eyes, shrinking and hanging down of the lips, the appearance of white hairs, particularly about the eyes, sharpening of the withers, swaying of the back, etc., etc.

The means of ascertaining the allotted period of the horse's age are as unsatisfactory as that of man. A horse is supposed to be as old at twenty-five years as a man at seventy, which is generally accepted as his allotted period of existence on this earthly sphere.

So many circumstances attend the domesticated animal, tending to the more or less rapid destruction of his system, that it is very difficult, if not impossible, to correctly ascertain the number of his years were the laws of his being never violated.

A few cases of great age are on record. Blaine tells of a gentleman who owned three horses, which died at the respective ages of thirty-five years, thirty-seven years, and thirty-nine years. Percival gives an account of a barge-horse that attained the great age of sixty-two years.

Perhaps it would be as safe to place the natural age of a horse at twenty-five years as that of man at seventy. Perhaps as great a per cent. of horses live beyond that age as of the human that lives over "three-score years and ten."

Zoölogists claim that the natural life of an animal is five times the time it takes to attain its full growth and maturity.

According to this rule the natural age of the horse would be about twenty-five years. But, after all, some horses are as old at twelve years as others are at twenty. And so of man, some men being as old at forty as others are at sixty years.

When a horse or a man is worn out and broken down, they become *old*, and it matters not how many or how few years have elapsed since their birth.

CHAPTER XXXIX.

THE LANGUAGE OF THE HORSE — AUTHOR'S EXPERIENCE.

Sagacity of Horses — Author's experience — Old Dobbin — Nellie Bly — Lady Barebones — Fanny Fern — Cora Linn — Fanny Kenyon — Maggie Dimon — Belmont Maid — Golden Rule — Rufus Molburn's mare.

ALTHOUGH horses classed as "dumb brutes" have a language of their own, none will, perhaps deny; but that they have a language whereby they may talk to man may appear strange to the uninitiated; yet I know that I can and do talk to my horses. My horses have a low whinny which means water; a higher-keyed, more emphatic neigh which means food; and whenever I hear these sounds I know as well what they need as if they had spoken in English.

My driving mare has also a neigh of welcome for me whenever I approach her after having left her on the street for some time, attending to my business in town.

When a horse sees or apprehends danger he will tell you so by a snort, low or loud, according to the, to them, seeming extent of danger.

I now have a mare doing business in the city that was formerly my driving mare, and every time I meet or see her in town she recognizes me by the same peculiar whinny of welcome with which she used to greet my approach when used as my buggy-horse, and it is the same as is used by my present driving horse. Still, I will admit that the language of the lower animals is not altogether articulate; it is more of the nature of the sign language. The horse does much talking by signs and motions, and especially motions of the ears and head, and by his wonderfully expressive looks. He also, upon occasions, talks with his other extremity. A peculiar switch of the

tail and a gesture as if threatening to kick, are equine forms of speech. The darkey was not wrong when he said of the kicking mule: "It's just his way of talking."

To be a successful practitioner of veterinary science one should readily understand the language of the horse, to enable him at times to locate the disease. Who among us, — with the heart of a Christian — understanding the language of horses (both vocal and silent), can withstand the pleading look of a horse in distress? But a short time since, while walking on one of the streets of our beautiful city, my attention was called to a horse by his neigh of welcome, and on giving him a look of attention such a pleading look as he gave me will be long remembered. I found the poor animal suffering terribly from having stood nobody knows how long, checked very taut with that vile implement of torture, an over-draw check-rein. It was but the work of a moment for me to relieve him of his discomfort, and the look of gladness and thankfulness displayed in his countenance was my reward.

At another time my attention was similarly called to a horse in distress on the street, who had been carelessly tied around a post or pole, and the tie-line had slipped down so low as to bring his head in a painfully low posture and held it there. When relieved he also thanked me in language which I understood.

One evening upon arriving home from town I inquired if all the animals had been properly cared for for the night. On receiving an answer in the affirmative, I inquired especially if my stallion, Stockton King (who occupied a barn separate from the others), had been watered. The man who had him in charge said "Yes." But hearing my voice, the poor neglected animal told me as plainly as if he had used the choicest English, that he had not been watered; and as if to prove his attendant an unscrupulous liar he drank two full buckets of water from my own hands.

SAGACITY OF HORSES.

The sagacity of horses is such as to adapt him to fill various places of responsibility with a readiness unknown to any other animal but man. On the battlefield he is a war-horse, entering into the strife with as much zeal and interest as his rider. On the race-course he is as fleet as the deer, often sacrificing his life and dying in his determined struggles for victory. On the farm he is a sagacious drudge, often using as much intelligence and judgment as his many-times ignorant and brutal driver.

On the road he becomes a locomotive, subject to such pressure of speed-power as the circumstances may demand. In the civic procession he is as airy as his rider, and intelligent enough to appreciate the plaudits of his admirers. As a hackney he is wise in the use of his forces and enters into the spirit of making an attractive turnout with as much pride as his master. At the stage-coach he is flying all aboard; at the private carriage he is as proud and disdainful as the petted beauty who sits behind him; at the funeral he is as melancholy as the mourners.

I occasionally get a new horse, and while I study my horse he studies me, and we gradually become acquainted, and it is surprising to note how soon an intelligent horse will learn the ways and requirements of his owner or driver. If I am a coward, he is one; if I am lazy he is lazy; if I am impatient he is impatient; if I am lost in thought how dreamily he pursues his way.

To what other domestic animal can we look for sagacity equal to that of the horse?

I have always imagined I could read in the conduct of the horse a certain measure of the character of his owner, somehow as you can see the character of the man in the empty hat that sits upon the table, yet you cannot tell why.

From my earliest boyhood's recollections I used to estimate the character and condition of my neighbors by the looks and conduct of their horses. When I saw a venerable pair seated in a rickety wagon drawn by a low-headed, slabsided, ewe-

necked, ring-bone mare that showed more marks of the stable than of the currycomb and brush, and that took the wagon by jerks along the road, I always pictured to myself the establishment from which that pair came forth.

When I saw the village doctor jogging about with rusty harness, dilapidated vehicle and melancholy horse, I drew my own inference and instituted a comparison at once between this man and his rival, who, without ostentation, kept his equipage in order and drove a well-selected, well-fed, and well-groomed horse; and had I at that time eaten enough of green apples or of my neighbor's watermelons to have required the services of a doctor, I should most earnestly have appealed for a visit from the one driving that best-looking and best-cared-for horse.

Every experienced horseman knows that an animal will be one thing in the hands of one driver and something entirely different in the hands of another. Hiram Woodruff could give new strength the instant he took the reins and Ripton and Dexter were inspired with new energy by his touch. Is not this sagacity?

A horse knows what he is doing and with whom he is dealing, and having learned his lesson it becomes as much a part of him as to be his second nature.

Some quite remarkable cases of sagacity exhibited by my own horses are as follows: In 1851 I was the owner of a gray Canadian horse having the old-fashioned name of Dobbin. He was not only a good, honest horse, but showed much intelligence in many things. Among others, being driven to the village — Wakefield, R. I. — on entering the town he would, with head and tail erect, voluntarily exhibit all the speed there was in him, and seemed to take great delight in making as much show as possible when before an audience of street pedestrians, but he became quite a commonplace horse when fairly out of town.

In the autumn of 1855 I was the owner of a very high-spirited, Vermont Morgan, chestnut mare answering to the name of Nellie Bly. She had not only run away several times

before coming into my possession, but had, in one case at least, kicked a buggy into smithereens. She, however, was a very sagacious animal, and soon learned just what I desired of her, and with kind and rational usage she proved willing at all times to comply with the demands made upon her. While driving this mare towards home one evening hitched to a farm lumber wagon loaded with barrels on end with a board seat and cushion on top, with my feet resting on the fore end-board — or end gate — and while on the shore road of Lake Worden in South Kingston, R. I., at quite a round trot — say ten miles per hour — she suddenly, from some slight and unexpected fright, sprang from the middle to one side of the road with a cat-like quickness. This quick movement threw me from my high and insecure position off on to the ground, and at least one wheel ran over my body. I was very badly hurt by the fall and the wheel, and unable to either regain my former seat or to walk home unaided, but this intelligent mare waited for me to tie up the lines, put the seat and cushion aboard, and get hold of the hind end of the wagon with my hands, and then she walked slowly every step of the way home, something like a mile and a half.

In 1862 I owned a chestnut mare by the name of Lady Barebones, a daughter of old Vermont Black Hawk. This mare was bred and for several years owned by the Messrs. Goddard of Providence, R. I., and was formerly driven by them in Providence. Several years after they had disposed of her, and on my driving her for the first time into Providence, while on South Main Street, much to my surprise, she pulled up to the curb-stone and cramped the buggy for me to get out at the office of her former owner and master. It is probable that five years had elapsed since she had been driven on that street.

Fanny Fern is the next of my own animals that I will mention in this connection. She was a bay mare with two white ankles and a stripe in her face. She was bred in the State of New York, and sired by Imported Consternation, consequently was half thoroughbred. This was one of the brood mares I

took with me to the Dimon Stock Farm, Pomfret, Conn., in 1866, and was afterwards the dam of Confidence, Fanny Allen, etc. I used this mare as a roadster, and once in making connections with a train I was obliged to run her for all I dared to in harness. She ever after that whenever I came out and got into the buggy with my "go-to-city" clothes on would pick up her ears and listen both ways for the sound of a train, and if the whistle sounded near enough to make it necessary for her to hurry she would fairly fly in order to be there in time. I once had her throw a shoe between my head and that of another with enough force, I think, to knock us off the seat had it chanced to hit either of us.

This mare would unbutton barn doors and would unfasten the horse barn door by pulling out the pin holding the hasp, and then unhasp and open it. She would also open grain chests and do various other tricks; and once, on having her young colt get hung in a stone bridge, she came galloping to me as near as she could get, and told me very plainly in her own language that something serious had happened, needing my immediate attention.

Another brood mare of mine on the above farm was the bay mare, Cora Linn, a Hambletonian mare by Gage's Logan, and the dam of Cora Dimon, Governor Dimon, etc. We used her on a milk-wagon in the town of Putnam, and so well did she learn the route that she would not pass or skip a single customer if allowed to have her own way. If we lost a customer she would try stopping there for about three times, after which she would try to pass that place at a high rate of speed.

Another sagacious mare owned by me was Fanny Kenyon, by Rhode Island. She was intelligent and patient enough to untie any halter knot that could be tied. She would also open doors, gates, chests, etc. She was the dam of that fast road horse, Colonel Sprague, by Sprague's Hambletonian.

Once, while raking hay with a wheel rake with this mare in my orchard, I left her tied to an apple tree long enough to ad-

mit of my going to the barn to mow away a load of hay. She evidently became anxious concerning a young colt which was left in the barn, and so untied herself and went to the barn. She carried the rake safely through a gateway just as wide as the rake, there not being an inch of space to spare, without any signs of having hit it against either post.

When engaged in the livery business in Detroit, Mich., in 1887–8, I had a highly-bred young Bashaw mare — Maggie Dimon, afterwards the dam of Maud Bayard by General Bayard. She was a very nervous, high-strung animal, but very intelligent. Many times during the dead hours of the night has she arrived at the stable with reins dragging on the ground and whinnied to be let in, while her drunken driver and stable patron failed to show up.

While living at Fern Hill Farm, Indiana, I had a coal-black brood mare, Belmont Maid. She was a granddaughter of Alexander's Belmont. One day I left her standing untied, hitched to a top buggy. The top was not sufficiently fastened on, and, the day being very windy, it blew over on the mare. She walked around the barn to find me and make known her trouble, while a less sagacious animal — or a timid one — might either have ran away or kicked the buggy to atoms.

I now have at this writing, June 7, 1894, an in-bred Hambletonian mare, Golden Rule, used daily on a milk wagon supplying some 150 customers. If left to herself she would go to every customer in regular order without missing one, and she stands in all places and all kinds of weather without hitching. There are at present two bad places in the road between the farm and the village, but the mare knows them as well as her driver, and thinks of them each day, always slowing up from a round trot to carefully walk over them.

When living in Connecticut in 1877 one of my neighbors, a former truckman in Providence, R. I., would sometimes indulge in a little too much fuddle-drink (pardon me if I have coined a new word) for his own benefit businesswise. He was the owner of a pretty little bay Morgan mare about a dozen years old.

She was an all-around good one, and he occasionally drove her to Providence, some thirty-two miles, sometimes returning the same day.

On one of these occasions he started for home in the evening in quite a hilarious condition; he not only fell asleep by the wayside, but he fell out of his buggy into the highway. He was only about half-way home, and he stayed there, unconscious, until daylight did appear. Then, his jag being slept off, he realized that he was lying in the road and that his bay mare was standing over him, but headed towards the city from whence he had started the previous evening. Upon investigation he learned that the little mare had gone all of the way home and stood in front of the barn. Not finding anyone with her, she had then returned all that distance — about sixteen miles — until she found her master; then she had patiently waited for him to sober up and was anxious to carry him home at a good rate of speed, although this made her ninety-six miles of travel in twenty-four hours.

This incident made such an impression upon the mind of her owner that he vowed that he would never get into such a fix again and that nothing should ever part him from his faithful mare.

Later on he made a provision in his will that if the mare survived him she should then be chloroformed and buried in the same grave with him. This provision in his will was faithfully carried out in 1890, and their two bodies now rest together in the same grave in the town of Putnam, Conn. The man's name was Rufus Molburn, and a granite monument now marks the spot where the master and his sagacious mare lie buried near the road leading from Putnam to Pomfret street, called the Perrin Hill road.

CHAPTER XL.

GRAY HORSES.

The White Turk — Imported Messenger — Gray Eagle — Harris's Hambletonian — Crack regiment of the British army — On the American turf — Kittie Bayard — Emma B. — Joe Brown — Miss Russell — Pilot Medium.

THE color of horses, as of all other animals and objects, is largely a matter of taste. It has been said that "a good horse cannot be of a bad color." Many persons strenuously object to white and gray horses. Now, while I do not wish to advocate the breeding of gray horses in preference to those of other colors, I do not by any means approve of the discarding of good animals of any breed because they happen to be gray.

Among the noted horses imported into England and which exercised a powerful influence in the formation of the thoroughbred courser, we find many grays; among these may be mentioned the White Turk, imported by King James I; Place's White Turk, D'Arcy's Turk, Honeywood's Arab, Sedley's Barb, Wellesley's Arabian, Bell's Arab, and Hutten's Gray Barb.

Imported Messenger, from whose loins descended our Hambletonians, was not only a gray horse, but his sire, Mambrino, was gray also. His full sister, Mambrina, was also a gray, and many of his best descendants. Among these may be mentioned Ogden's Messenger, Bush Messenger, Young Messenger, Coffin's Messenger, Winthrop Messenger, Stone Messenger, Harris's Hambletonian, Messenger Duroc, Munson Mare, Lady Suffolk, Chancellor, the Engineers, and many others that might be mentioned. Gray is the family color of the Messengers to a marked degree.

The same may be said of imported Medley and his descend-

ants, Gray Eagle, together with his family, and many others of our best horses of modern times.

The crack regiment of the British army has always been one of cavalry consisting of gray horses only. This regiment of "Scot Grays" made a charge at the great battle of Waterloo in which was decided the fate of the great Napoleon, as the unfortunate emperor afterwards declared.

The French stage horses are nearly all gray. This is the prevailing color of the horses of La Perche, who in that country are known as Percherons; also of the horses of Normandy which formed the cavalry of William the Norman, who subdued England nine hundred years ago by the aid of these magnificent war horses.

There is an old adage to the effect that "the gray mare is the better horse," and although — it is said — this has been distorted in its meaning into an insinuation that the woman overpowers the man and makes of him her slave, it is, like most popular sayings, based on the result of common experiences.

Gray horses have figured quite prominently on the American turf. Is it because Messenger, the alleged fountain-head of speed at the trotting gait, was a flea-bitten gray? Or because Young Bashaw, the paternal progenitor of the Bashaw and Clay branches of the American Trotter, was gray? Or is it due to the fact that one of the great pillars in the construction of the Morgan family, the Lindsey Arabian, was gray?

One thing is sure; the gray horses of the trotting turf have been found to be among the staunchest and speediest of race-horses.

Among these gray horses that have appeared before the public, and whose names are inseparable from the American trotting turf, are the following:

Kitty Bayard, now holding the world's race record on a half-mile track (2.12) and the world's pole record of 2.13½; Hopeful, 2.14¾, with a wagon mark of 2.16½; Lucy, 2.14; Alcyron, 2.15¼; Alabaster, 2.15; Dandy Jim, 2.16; Phil

Thompson, 2.16½; Charley Ford, 2.16¾; Hendry, 2.17; Sally Benton — four years old — 2.17¾; Glen Miller, 2.18; Kitty Bates, 2.17; Tyrolean, 2.20½; Independence, 2.21¼; Emma B., 2.22; Joe Brown, 2.22; Conway, 2.22¼; Farmer Boy, 2.22½; Shepherd Boy, 2.23½; Crown Prince, 2.25; Conductor, 2.25½. Two of the above, *viz.*, Kitty Bayard, 2.12, and Emma B., 2.22, were sired by the gray horse Bayard, the best son of the gray horse Pilot, Jr., who was the son of the gray mare Miss Russell, the dam of Maud S., 2.08¾, who so long held the world's record, and who still holds it in the same way of going in which she made it.

The greatest and best of the get of that renowned Hambletonian sire, Happy Medium, sire of Nancy Hanks, 2.04, was the gray horse Pilot Medium, and whose dam was the gray mare Tackey, 2.26, by the gray horse Pilot, Jr.

In the great race in Hartford, Conn., in 1881, Emma B., 2.22, a gray mare by Bayard, lapped the winner out in 2.17.

The gray horse Bayard, by Pilot, Jr., and the sire of the above-mentioned Kitty Bayard, 2.12, and Emma B., 2.22, although obtaining a record (in the little amount of track work given him) of only 2.30, was said to be possessed of more natural speed than any other stallion that ever lived up to his time.

The dam of that greatest of campaigning stallions, Ethan Allen, was a flea-bitten gray.

Flying Jib, by Young Jim, with a record of 2.04¼, and public trial of 2.04, is also a gray gelding.

Not only on the race course has the gray horse won distinction, but in the various departments of labor as well. Superintendents of street car stables have told me that the gray horses will stand the summer heat better and do more work and last longer than horses of any other color. Whether worked to the street car, the express wagon, the hack or coach, the family carriage, or the plow, he has ever been distinguished for beauty and endurance.

The Arab of the desert is most partial to gray horses, and

gray is not only the most fashionable color in Arabia, but is said to be the prevailing color of its best animals.

General Washington's favorite war horse was gray, and it appears that gray was a favorite color for horses with him.

A turf writer remarks that "A feature which seems to belong to gray horses to a greater degree than to any other is longevity." It is true that old Mambrino lived to the age of thirty-two years; Messenger to twenty-eight; Gray Eagle to twenty-eight; Lady Suffolk twenty-five, and Gray Diomed twenty; and is not the typical *old gray horse* known in every neighborhood throughout the land?

I have not intended this history of gray horses to influence anyone in their favor, or as an argument to show that they were superior to those of other colors; but rather to call attention to the fact that color was a matter of taste or prejudice, and that a good horse or a good breed of horses should not be valued the less on account of its color, even if that color should happen to be gray.

EXHIBITION OF HORSES.

Perhaps there has never been a more entertaining exhibition presented the American public than that of the speed of American horses; but to me the most entertaining, as well as instructive, amusement has been to watch the exhibition of the best American-bred horses themselves, individually, when collected together in sufficient numbers to make the comparison — one with another — the most interesting.

The first horse exhibition of this kind, of any importance, held in this country took place at Springfield, Mass., in October, 1853, under the auspices of the City of Springfield and the United States Agricultural Society. At that time about five hundred of the best specimens of various breeds and families of that period were placed on exhibition.

Since then we may have had larger and better exhibitions; indeed, we undoubtedly have had such, but this goes on record as the first national horse show of America, if not of the entire world.

CHAPTER XLI.

THE HORSE'S FOOT.

The wall — The sole — The frog — The bars — Coffin bone — Pedal bone — Shoeing horses — First introduced into England A.D. 1060 — Requirements of public shoers — Injuries by bad shoeing — Leveling and balancing — No foot, no horse — Never pare sole or frog — Fit shoe to the foot — The clip — Use of rasp in shoeing — Fiber shoes.

THE external anatomy of the foot may be divided into four important parts or divisions, *viz.:* The wall or outer crust from the coronet to the sole; the sole, that part which covers the whole remaining bottom of the foot excepting the frog and the bars; the frog, consisting of that insensible, spongy, triangular body in the center of the foot; the bars, which are merely a continuation of the wall, extending therefrom at the heels obliquely into the center of the foot between the sole and the frog, constituting two inner walls or lateral fences between that body and the sole. In a state of nature they bear some pressure.

The Wall. The circular boundary wall inclosing the internal structures from the coronet (the border line where the skin joins the hoof), in an oblique direction to the bottom of the foot, terminates in a circular projecting border; consequently we find that the wall is the natural bearing part of the foot, and the frog an accessory. The bearing of the shoe should be wholly on the wall, not on the sole; and the ground surface of the wall is the only part that should ever be pared. This is the part that, like the human nail, grows "exuberantly," and must be pared down every time that the horse is shod, but the knife should never be used on the sole or frog. This wall is adapted as a defense to the sensitive parts within. It is composed of small filaments or hollow tubes, consolidated in such

a manner as to distinctly preserve the canals. These canals constitute the excrementation outlets of the hoof through which mortifice or waste matter make their exit; and in them may also be found the vessels in which the horn is secreted. The small vessels arising from the vascular and nervous membrane beneath the hoof, which is considered as a continuation of the true skin, enter also into these canals. The nails of man correspond to the hoof of the horse, inasmuch as they are formed of a substance analogous.

If we examine the nail under a microscope we will find that it consists of hard, transparent, and somewhat elastic plates which adhere to the vascular or nervous membrane of the papillæ. The latter are arranged in longitudinal and parallel rows. The internal surface of the nail, like that of the hoof, is soft, pulpy, and marked with longitudinal grooves and prominences corresponding to the laminal found within the hoof. A similar arrangement, possessing, however, exquisite sensibility, is found on that portion of the finger covered by the nail; and by the natural adaptation the connection between them is sustained. The nails are also a continuation of the true skin.

The Sole is the plate at the bottom of the foot united to the inner edge of the wall and the outer sides of the bars, and not to the lower surfaces. Its usual thickness is about one-sixth of an inch, but varying greatly in different horses; it is thicker where it runs back between the bars and the wall. It is secreted in plates which can readily be separated with a knife. The sole is considered to be more elastic than the wall or crust, and is the medium of the sensitive faculty, through which — together with its powers of elasticity — the percussion of the foot against the ground is regulated. In shoeing this should never be cut into, as by so doing it would weaken the foot.

The Frog is still more elastic than either of the parts described, and any unnecessary paring on the part of the shoer is to be deprecated. The natural function of the frog is that of

a cushion; and, being spongy and elastic, when required to bear weight it spreads, and to accommodate this action the wall expands from the quarters back.

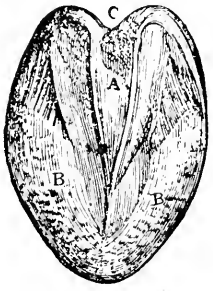
The structure of the foot is such that even if the frog sustains no pressure the heel must spread at every stride when the weight comes upon the foot. It can readily be imagined what the effect must be of shoeing a horse so that the heels are held rigidly together by an unyielding shoe.

The Bars form an angle at the heels which terminates toward the toe. They serve to give strength and durability to the hoof, prevent contraction of the heels, and thus aid the hoof in protecting the soft and sensitive parts. The internal portion of the bars present the same appearance as that of the crust. They are held together by vital affinities, and so long as they maintain their normal integrity the foot will preserve its form.

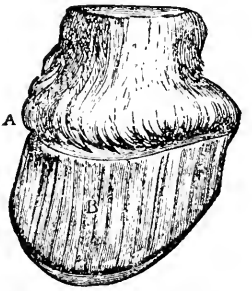
The principal internal parts of the foot are the coffin-bone, the navicular or shuttle-bone, the coronary substance, the sensitive sole, the sensitive frog, and the lamellæ, together with numerous ligaments. It will thus be seen that the foot of the horse is a most complicated structure, which is liable to derangement whenever the foot is interfered with; and this may occur in mismanagement in shoeing, causing incalculable injury, or from inflammation of the secreting surface, which will terminate in the formation of imperfect horn, or from punctures or other wounds of the foot.

Perhaps in no organ does an injury so soon produce a return for the inevitable first result as a malformation of the hoof, and this again only adds to the original mischief. It is necessary to examine the structure of the foot most carefully, not as an object of curiosity connected with the sense of touch, but on account of the numberless diseases and accidents to which it is subject. No part of the horse is so liable to injury from the effects of hard work or mismanagement as this, and there is, consequently, none which more requires our care both in health and disease.

A close examination of the parts entering into the internal composition of the foot, as fully illustrated by the accompanying cuts, will disclose the fact that there is very little space

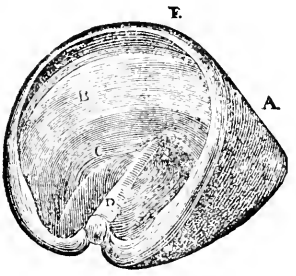


—THE UNDER SURFACE OF THE FOOT.
A. Cleft of frog.
B. B Sole.
C. Cleft between heels



—FRONT VIEW OF THE FOOT, WITH THE HOOF REMOVED.
A. Coronary substance.
B. Laminæ.

between the pedal bone and the crust, which, together with the sole, form a horny case or natural shoe for the sensible and delicate investments of the bone. So small is the place that when inflammation takes place there is no room for a swelling — the invariable accompaniment of that disease — and intense



—THE HOOF.
A. Outer surface of crust.
B. Inner surface of crust.
C. Upper surface of sole.
D. Part corresponding with the cleft of the frog.
E. Coronary band.

Contracted foot of horse with supposed Navicular Joint Disease DEAD LAME.

pain is occasioned as well as rapid disorganization of the structure itself. The horny case — the hoof — is attached to the foot of a delicate membrane which lies in the folds upon the pedal

bone, and it can be torn away by violence or when putrification has commenced with great ease.

Hence it is that in the foot more than any other part of the horse "prevention is better than cure," because in many of its diseases it happens that cures cannot be effected without long rests.

SHOEING HORSES.

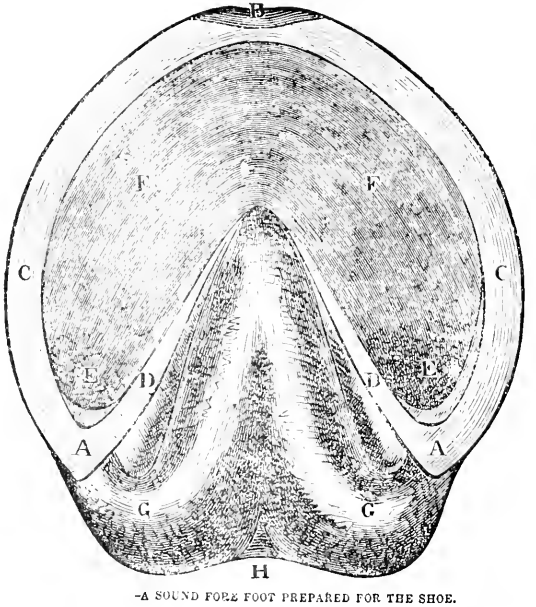
Horse-shoeing was first introduced into England by William the Conqueror in about A. D. 1060, more than eight hundred years ago; and while we have schools and colleges for the instruction of students in the treatment and cure of the diseases of the horse, yet we expect those whose daily business is to perform surgical operations upon a delicately organized member to be reasonably successful without having learned even the alphabet of their profession.

Among shoers of the horse there are undoubtedly individuals of intelligence and ingenuity who would be glad of an opportunity of testing the validity of their practice by an appeal to the condition of the hidden springs, levers, pulleys, cushions, and powers comprising the mechanism of the feet and legs as explained by those who have made such a life-long study. Perhaps some of the readers of this book may live to see the day when a public shoer of horses will be required by the law of our land to be a graduate of some school or college for the purpose; just as a veterinary surgeon or an M.D. will be required to be a graduate and display a diploma or be subjected to penalties more or less severe for practicing either without.

The injuries liable to be done to the horse's foot by bad shoeing are numerous, but in some cases not immediately inflicted. They are, however, only the more dangerous on this account. They are brought on gradually by the continued evil practive of bad shoeing until the horse is totally destroyed by it, the owner never suspecting the true cause of the difficulty; or if he should hint such a thing, his blacksmith, watchful of his own interests, refers it to anything but the shoeing

When we consider that the value of a horse depends more on the value and soundness of his feet than upon any other qualifications, it stands us in hand to give more thought and attention to keeping them sound than is generally bestowed on this subject.

The great foundation of scientific shoeing is based upon trueing, leveling, and balancing the feet; and to begin properly the first shoeing is the most important of all.



A SOUND FORE FOOT PREPARED FOR THE SHOE.

A The heel of the crust
B. The toe.
C C The quarters of the crust.
D D The bars as they should be left with frog between them
E E The angles between the heels and bars where corns appear.
F F. The concave surface.
G G The bulbous heels.
H. Cleft

Old horsemen admit the truth of the old aphorism, "No foot, no horse," and yet in no portion of that animal's economy has he suffered so many wrongs, or, as a natural consequence, endured so much unnecessary suffering, as in his feet; and to shoeing a large proportion of these evils are directly or indirectly referable.

That the system of horseshoeing as it stands, even in the most skillful hands, is decidedly pregnant with mischief to the foot, no one who is conversant with the facts will venture to deny. Every time a horse is shod, every time a nail is driven, means so much injury to the foot. The better the job, the less that injury is; but there is no such thing as absolute immunity from an evil which must always exist in inverse ratio to the skill displayed in the execution of the work. We have, however, to deal with facts as we find them, and if we have, day by day, to impose upon our horses work of a nature which entails upon their feet more wastes of power than Nature can replace during the ordinary interval of rest, we are obliged to adopt a defense of some kind.

A human being can tell where his shoe hurts him; a horse cannot; therefore he has to suffer the pain. Just think of how many sufferers there are. More than half of the men who presume to shoe horses ought to be tried and convicted of cruelty to animals. All they do is to slash and spike the animals by guesswork. One side of the foot is almost sure to be lower than the other; what a strain it brings on the knee when one side of the foot is half an inch lower than the other. It wrenches it from the knee to the coronet joint, causes more pressure on the lower quarter, and also creates contraction by a continual pressure against the corner of the coffin bone in both forward and hind feet. Tipping the foot to one side or the other causes a strain on the spavin joint, which, in turn, causes lameness.

There is another evil which is much practiced by inexperienced workmen, and that is lowering the outside of the hind foot in order to prevent interfering. This is wrong. No matter how much the foot is turned both pastern and cannon bones will have to come to the center of gravity, and rolling the ankle often causes them to cockle very badly.

Man may, by fitting up the feet in various ways, gait a horse, or produce certain results which may be desirable, but any and all tampering with the feet so as to turn them out of

their natural form is, sooner or later, bound to result in soreness or lameness for the horse.

My experience is that the best way to balance the trotter or roadster is to balance the feet themselves and adjust a shoe that carries out perfectly that balance. Shoes, however, may be so made and adapted as to temporarily change the action of the knee hitter, the elbow hitter, the forger, the scalper, and other wrong and deviating gaits; but they will not cure the animal of any of these faults if the foot that offends be still allowed to remain in that faulty position that caused the irregularity complained of.

A serious objection to the use of such inventions is that most of them do actual harm to the joint tendons and muscles of the animal. It should ever be borne in mind that the instinct of the horse suggests to him the action or gait that is the easiest for him to use, and such he will invariably employ. Should this motion be wrong and not in proper rhythm, and the animal is forced to adopt, by the use of artificial appliances, any other line of action without the faulty articulation being corrected, he will do so at a cost of injury to some parts of the motive power.

One of the most frequent causes of unbalanced gaits is the constant cutting away at the heels, leaving the front of the foot all out of proportion as to depth and length. The only proper way to "balance the trotter" is to have his feet truly balanced and in proper proportion and at proper angle to the limbs they support, so that the articulation will be as near frictionless as possible.

With this condition maintained, the animal's instinctive action will be even and true, with perfect rhythm. As to the proportion and angle of the foot to the limb, get the foot at the proper depth and length in front and at the heels so that to the eye it will look as though it was set under the leg in artistic comfort. When it is thought that you have the feet well balanced and in proper position and angle to the limbs, rasp off the edge of the walls at surface and drive the horse a

few days barefooted. It will not hurt him nor hurt his feet, for the feet when sound and healthy — if the soles have been left intact, as they should be — do not need any protection of iron nailed on to them.

If the horse's gait is smooth and even at the trot without shoes, you have got him balanced. Now then, shoe him with exactly the same weight of steel on each of his four feet. That is, make the hind shoes of the same bar of steel that the fore ones are made of. Why should you put more weight on one foot than another, when your trotter is perfectly balanced when barefooted.

Never in shoeing pare the sole; leave that and the frog untouched. If the feet are true and balanced, make the shoe of the same thickness all around from heel to toe. With a perfectly leveled and balanced hind foot use no calks on the heels of the shoes, as they will throw the foot out of balance. In preparing the foot for the shoe do not with a knife touch either the frog, sole, or bars. In removing surplus growth from the wall of the foot to receive the shoe, use a rasp or cut nippers and not a knife.

Opening the heels or making a cut into the angle of the wall at the heel should never be done. Care must be used that the shoe is not fitted too small, the outside surface of the walls being then rasped down to make the foot to fit the shoe, as often happens.

A hot shoe should not be applied to a horse's foot under any circumstances. Keep the foot level and as near the form when shod as the natural colt foot as possible. Again, I say, never cut the frog in shoeing; nature intended it to remain soft and spongy. It is in reality the lung of the foot — it is just what the leaves are to the trees, and requires no pruning. No matter how pliable and soft the frog may be, if cut away on all sides, in two or three days it will become dry and as hard as a chip.

If a red-hot shoe were put upon the foot to burn it level,

the burning process would deaden the hoof and tend to contract it.

Fit the shoe to the foot, and not the foot to the shoe by burning. If one doubts the effect of a red-hot shoe on the hoof, let him apply a hot poker to his own finger nail.

Nearly all writers on the subject have looked upon the foot as a wonderful and complex piece of mechanism, and seemingly have forgotten or have not known that, no matter how complex it may be within, it is enclosed within a simple horny box; that all the effects of shoeing should be directed to preserve that box in a natural condition, and that its position in relation to the limb should not be altered by the shape or form of the shoe.

If our blacksmiths would use their knives less and their heads more in the execution of their important and by no means easy duty, our horses would be better for it, and so would their owners.

There is no great mystery surrounding the subject, and the application of ordinary common-sense, in lieu of the barbarous routine which has been so long handed down from generation to generation until it has actually become a portion of the blacksmith's creed, would go a long way toward obviating many, if not most, of the cruel wrongs to which our horses' feet are day by day needlessly subjected.

One common error in shoeing is in using the clip or upper projection on the toe of the shoe, so common in many parts of the country. The only advantage claimed for this extra piece of work is that it is necessary in assisting the nails to hold the shoe solid, a claim that I am not ready to admit. The hoof is injured by the notch cut to receive it and the burning to fit it in. After it has been lodged in the toe the powerful bearing of all the nails against it prevents the expansion so necessary to the healthy growth of the foot.

It is necessary for the hoof to expand in its growth while shod, and its natural action should not be impeded at any point. The shoe should be set level with no other fastenings

than the nails, driven just outside of the seam, bearing a proper slant to the shape of the hoof. In its expansion the spongy or flexible part of the hoof next to the seam readily yields to the nails, and while the shoe is yet held tight the growth of the foot is not retarded; but when the clip holds the shoe solid out even with the toe, the bearing of the nails inclines the side walls of the hoof forward with a tendency to contraction of the heels.

The bearing of the shoe, remember, should be wholly on the wall, not on the sole, and the ground surface of the wall is the only part that should ever be pared. This is the part that, like the human nail, grows and must be cut down every time a horse is shod. Never put a nail back of the widest part of the foot — the quarters — thus leaving the heels free. The walls of the foot should be so trimmed that the frog will lightly touch the ground, but take little or no weight. It is one function of the frog to keep the heels open and healthy; if it is destroyed by the shoer's knife it allows the heels to contract.

Never allow the outside of the foot to be robbed by the rasp of its cortical layer of natural varnish, which retains the moisture secreted by the economy; the strong walls become dessicated and weakened and the foot is in a very sorry plight indeed. To some this picture may seem overdrawn, but it is, nevertheless, a matter of daily occurrence.

My experience and observation has been that no horse that carries a high rate of speed in a race of split heats seldom, if ever, was known to make a successful campaigner shod with short toes and high heels, or the reverse, or both, and encumbered by hobbles, sideweights, toeweights, heelweights, calks of all kinds, lengths, shapes, and sizes, set on at as many various angles, or any artificial appliances, which are sure and certain to keep a horse from being a perfect articulator, and a perfect articulator he must be before he is a successful campaigner at a high rate of speed.

The time will undoubtedly come when many of our driving horses, as well as fastest trotters, will be shod with fiber shoes.

For horses requiring the lightest shoeing there is nothing better. They weigh from two to three ounces, and, in durability, rival the metal shoes. One of its best features consists in the shoe wearing rough instead of smooth, thereby assisting the foothold. For tender-footed horses or those liable to fever up there is no shoe superior to this. The material is furnished in strips from which the shoe can be cut.

I have sometimes had horses used on the city paved streets whose feet had become dry and brittle and the frogs and bars as hard as horn by being mutilated by the drawing knife of the shoer, shod — after leveling the foot — with a pad of sole-leather placed under the shoe and the space between the sole and the leather filled with pine tar and oakum. The results were very satisfactory.

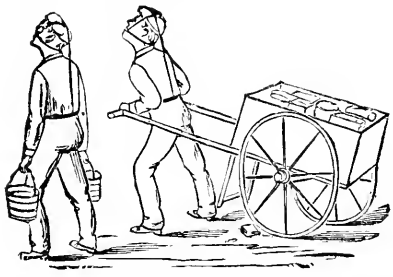
CHAPTER XLII.

THE CHECK-REIN.

Taut checking injurious — The overdraw check — The natural beauty of the horse — Stumbling.

A TAUT check-rein is painful to the horse and useless to the driver, as a rule. It fastens the head in an unnatural position, and as the head and shoulders fall together, cannot be of any real support in case of stumbling. There is a difference between a tight check-rein and a tightened rein, although perhaps not generally understood. The first is injurious and cannot help the horse if he should stumble; the last often saves him. That the check-rein is inconsistent with the action of the horse's head is clearly shown by the fact that when a horse falls it, or the check-hook, is always broken.

If a man has a heavy load to push or to pull he always lowers his head by bending forward and throws the weight of his body against or to propel the load; so does the ox or the horse under similar circumstances, if permitted. If a man's head were tied to a belt around his body so that he could not bend forward, he would lose the advantage of his weight and could only pull or push with the muscles; so also with the ox or horse.

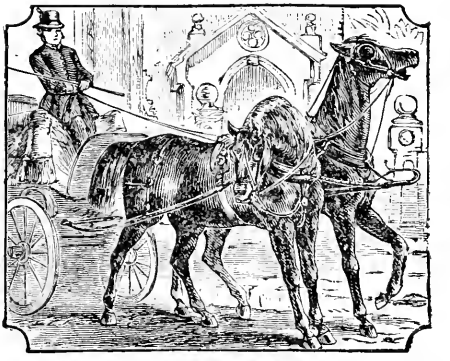


If the man's head were thus kept in a perpendicular position he could not so readily see where to step, and would be more apt to stumble; so, also, with the ox or the horse. No one in the saddle would thus tie up his horse's head. The horse is thus prevented oftentimes from throwing his weight

into the collar by a taut check-rein, a useless and painful incumbrance, introduced by vanity and retained by thoughtlessness amounting to cruelty.

THE OVERDRAW CHECK.

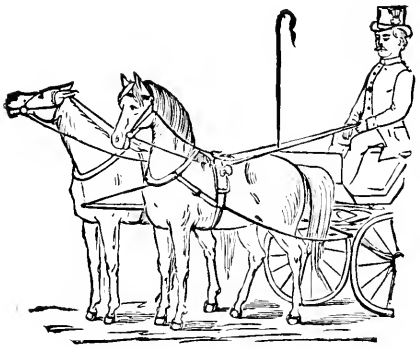
While it has its advantages in controlling kickers and pullers, and especially pullers in races liable to check down, this, nevertheless, is a cruel and barbarous appliance to the average driving or business horse; for under the continued strain of the overdraw check something must soon give away (for every horse, as well as man, has his weak points), and if not the body the temper soon wears out.



Although large dealers train their sale horses to this check they recognize the harm of it when they say that customers who practice short checking wear out their horses more quickly and sooner return for fresh ones. One year's hard checking caused a pair of Kentucky's valuable coach horses to become so sway-backed as to be wholly unfit for good use. Of all cruel devices inflicted on this noble animal none has ever come under my observation more so than this senseless overdraw check, which article of torture should never be used on anything but a kicker, or an animal liable to kick or a hard puller or lugger; and even then it should be loosened at the earliest possible moment consistent with safety.

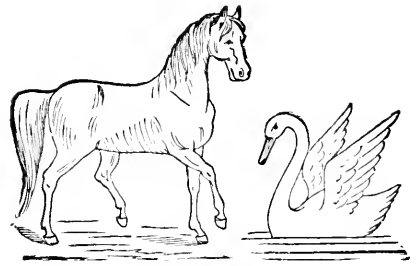
A day of watching the best horses in any of the large cities as they are being driven at the present period, will reveal the fact that this cruel torture is imposed on them under the impression of their owner or driver that the taut overdraw check enables them to exhibit more style than the loose, com-

fortable common check. The real fact is, however, that the horse with neck straightened, thus having head and nose extended forward, is greatly injured in appearance as well as being unnecessarily tortured.



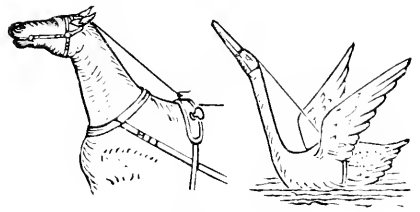
A well-fed, well-groomed, spirited horse is the most beautiful animal in existence; his beauty consists of his elegant proportions and the contrast that comes from his supple movements and handsome color and the graceful curves that outline his body.

All of this is seen from a study of the animal in a natural condition. Particularly will the artist observe the graceful arch of the neck of a beautiful horse; this curve is one of the chief beauties of this handsome animal, and this feature of attraction is entirely destroyed when the neck is straightened by the overdraw check; consequently, while this check has its use, its misuse—its abuse has made it an object of abomination.



No. 1.

The gracefulness of manner and ease of motion of the swan, in its natural state, cannot be excelled. The naturally beautiful arch of its neck is marvelous to behold. The neck of the highly-bred American horse of to-day, in its natural state, approaches nearer to that of the swan than any of our domestic animals. Now, suppose that we, sensible and enlightened



No. 2.

American people, just to humor a fad, set about improving that gracefulness of manner and ease of motion, in both the swan and horse, by the use of the overdraw check-rein, then we shall change the accompanying cut No. 1 to that of No. 2. Can any of my readers see any great improvement in this? If not, then why torture the poor things!

THERE BE THOSE.

THERE be those who sow beside
The waters that in silence glide,
Trusting no echo will declare
Whose footsteps ever wandered there.

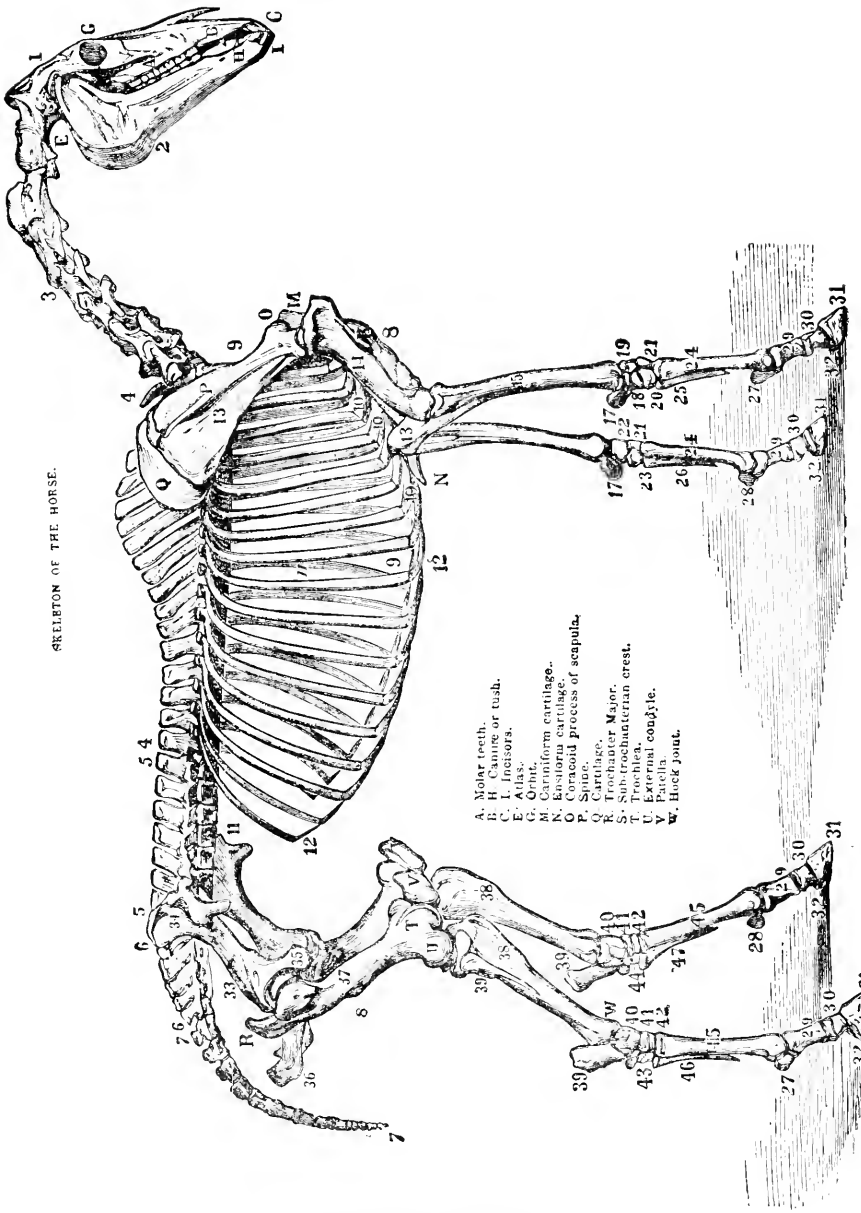
The noiseless footsteps pass away,
The stream flows on as yesterday;
Nor can it for a time be seen
A benefactor there had been.

Yet think not that the seed is dead
Which in the lonely place is spread;
It lives, it lives — the Spring is nigh,
And soon its life shall testify.

That silent stream, that desert ground,
No more unlovely shall be found;
But scattered flowers of simplest grace
Shall spread their beauty round the place.

And soon or late a time will come
When witnessess, that now are dumb,
With grateful eloquence shall tell
From whom the seed, there scattered, fell.

BERNARD BARTON.



EXPLANATION OF FIGURES.

1. The Parietal, or upper bone of the head. 2. Jaw-bone. 3. Bones of the neck, seven in number. 4, 5, 6. Spine, or back bone. 7. Tail-bones. 8. Breast bone. 9, 10. Cartilages of the Ribs. 11, 12. Ribs. 13. Shoulder-blade. 14. The arm. 15, 16. Bone of leg above knee. 17 Elbow. 18, 19. Upper knee-joints. 20, 21. Lower knee-joints 22. Knee-cap. 23. Inside of lower knee-joint. 24, 24. Cannon bones. 25, 26. Splint bones. 27, 28. Pastern. 29. Upper pastern. 30. Lower pastern. 31, 32. Hoof. 33, 34. Pelvis. 35. Upper thigh bones. 36. Rump bone. 37. Lower thigh bone. 38. Tibia, or leg bone. 39. Hock bone. 40. Hock joint. 41, 42. Upper and lower hock joint. 43, 44. Outside of lower hock joints. 45. 45. Shin bones. 46, 47. Splint bones of hind legs.

CHAPTER XLIII.

BRIEF HISTORY OF VETERINARY SCIENCE.

Necessity the mother of invention — First veterinary school of the world 1761 — First in England, 1795 — Quack medicines generally well advertised — Opinionated grooms — Veterinary quacks.

AS "necessity is the mother of invention" the veterinary science, like that practiced on man, was first called into existence by necessity. The many diseases to which domestic animals were subject and to which they too frequently fell victims for want of proper professional care, and the great agricultural loss in consequence thereof, led their owners to seek for reliable remedies.

In the year 1761, the first veterinary school in the world was established at Lyons, France, under the patronage of the French government, whose fostering care this infant school for a time received.

At the commencement of this great enterprise, as at the commencement of all great enterprises, the people looked on with indifference; but many of the most scientific and liberal-minded men of that day saw in the enterprise a vast field for research, a broad road to usefulness and distinction. Consequently, many such men embarked in it with perseverance, overcoming every obstacle with a view of making known those laws regulating the vital forces of domestic animals; and to this day the fruits of their labors are received as a legacy to the profession. The names of the first cultivators of veterinary science are well worthy the inscription on tablets of stone as public benefactors to their country.

In 1765, a similar school was established at Alfort, France. Regular system of veterinary medicine was taught at this school, under which students acquired an acquaintance with the vari-

ous forms of disease to which domestic animals were subject and the *modus operandi* of treatment.

This novel enterprise of France was regarded with a watchful eye by the other nations of Europe, and they were not long in adopting similar schools. Such schools rapidly sprang up in Holland, Berlin, Copenhagen, Stuttgart, and various other places, rivaling in successful and beneficial results the schools of France. It was not until 1792, however, that England was awakened to the importance of this subject, and then her attention was first called to the same by a Frenchman by the name of St. Bel, who carried letters of introduction from some of the first and most influential men of France regarding his mission, which was that of establishing this veterinary science, then unknown and of course unappreciated in the British domains.

This St. Bel labored hard and unceasingly with the English public for the period of upwards of two years before being able to successfully present his claims for this science and impress upon the people the importance of establishing veterinary schools and colleges for its teaching. The final result of his labors was the establishing of the Veterinary School of London in 1795, of which St. Bel was appointed professor.

Unfortunately, after all his trials and struggles in his efforts to accomplish so much for England and his beloved science, he had occupied the professor's chair scarcely one year, when a sudden and brief illness terminated his mortal career; and he was consigned to the silent tomb before the laurels to which he was so justly entitled had encircled his brow.

The college, however, was left in a flourishing condition, (the Duke of Northumberland having already contributed a sum equal in currency to $2,500), and the enterprise numbered among its staunch supporters such men as the Earl of Grosvenor, Mr. Penn, Earl of Morton, Drs. John Hunter and Crawford, and, subsequently, that great surgeon and medical scientist, Sir Astley Cooper.

Medical men hailed this new enterprise as one not only calculated to ameliorate the condition of suffering domestic

animals, but what was of greater importance to medical science, they perceived in it a fruitful field for investigation, cultivation, and comparative anatomy and physiology.

With this object in view Dr. John Hunter assisted the friends of the new school both by his professional influence and by his private purse. Among the first pupils graduating from this "Alma Mater," and becoming proficient practitioners in the veterinary science may be mentioned the names of Laurence, Blair, and Clark. Each of these has left to the world a record of their labors, which, even in this enlightened age of the world, serve as useful guides to the young aspirant for veterinary fame.

The professorship made vacant by the death of St. Bel was conferred on a Mr. Coleman, who had previously devoted himself to physiological research; he, too, soon distinguished himself in his profession, and the college was soon placed in its former flourishing condition. A medical committee was then appointed, consisting of some of the foremost practitioners of that day. Before this committee the pupils were examined, and when found to be possessed of the required amount of knowledge of the science, a certificate was accordingly granted.

This examining committee consisted of lecturers and practitioners of human medicine, who, with a liberality that reflected great credit on them, permitted the veterinary students to attend their lectures on human anatomy free of charge.

In this combination of the greatest and best men of England at that time, a death-blow was aimed at ignorance, quackery, and the superstitions of the times. A new order of practitioners took the field, and soon demoralized the old landmarks set up by ignorant farriers, erecting in their stead "beacons of light" that spread their illuminating rays of science broadcast throughout the land; and the public as well as domestic animals was greatly benefited thereby.

By this time Professor Coleman had succeeded in securing the patronage of the British government. The strings of the

public purse were loosened and Parliament voted a sum of money to be paid annually for the support of the college. George the Third, then reigning monarch, granted the rank of commissioned officers to such veterinary graduates as were intended as surgeons to the cavalry regiments.

The East India companies, observing the good effects produced by such appointments, followed the example of their monarch in appointing veterinary surgeons in their armies in India. Other nations have since followed the example set them by France and England, so that regular veterinary surgeons may be found in all quarters of the globe. The advantages under which the veterinary art may now be studied, not only in France, Germany, and England, but in America as well, are not in any way inferior to those of the most favored universities, and such astounding discoveries through the aid of chemistry and the microscope are made in such rapid succession, that the medical world is constantly subjected to surprises; and so splendid have become the achievements in the departments of veterinary surgery that the sons of "Æsculapius"—our brethren of the human school—are watching the labors of their kindred spirits with no ordinary interest.

QUACK MEDICINES.

Quack medicines are those prepared by private or secret recipes, or formulas. They are generally well advertised and puffed in the newspapers, and millions of circulars are issued setting forth the infallibility of their curative powers for nearly all diseases to which human or beast flesh is heir;—used either as an external application or administered internally.

No subject in medicine has been more fully exposed than the great and absurd pretensions of these medicines; still, the credulity of even the best class of society is great, and among them may be found the readiest victims of these humbugs.

My old friend, the late P. T. Barnum, used to say that the American people were the most easily humbugged of any people

in the world, and that they actually enjoyed being humbugged. These people now have a fad of lending their names and furnishing photogravures of themselves to the manufacturers of these medicines, and allow them to write up the most wonderful cures of themselves by the use of these quack nostrums.

At the present day we can hardly take up a newspaper without finding a page, more or less, devoted to these advertisements, and containing from one to three or more cuts of good, healthy looking people who claim to have been cured of some terrible malady, or complication of diseases, by the use of certain medicines therein advertised.

It should require no argument to show how dangerous is the indiscriminate use of powerful drugs when compounded by parties who, quite likely, never had the slightest opportunity of acquiring a medical education. No wonder such persons cannot cure by their remedies diseases deemed incurable by the veterinary medical world.

After all there is no quack on earth equal to an opinionated groom, and every one, nowadays, holds himself a groom, who is intrusted with the care of a horse, even if he does not know how to clean him properly or to feed him so as not to interfere with his working hours.

An experienced and level-headed man is a treasure in any stable, but the worst sort of a nuisance is one of those fellows who has no more idea of a horse's structure or of his constitution than he has of the model of a ship, and who is sure to have a thousand infallible remedies for every possible disease, the names of which he does not know, or their cause, origin, or effect; and if he did know their names he is incapable of distinguishing one from another.

He applies his remedies at haphazard, wholly in the dark as to their effects on the system generally or in this particular disease. Of course nine times out of ten he applies them wrong and aggravates many fold the injury he affects to be able to relieve.

This class of grooms is rather inclined to administer purgatives, cordials, diuretics, and such like, on their own hook rather than on discrimination, without much sense or reason, with the mistaken idea that they are necessary in order to keep the animal in good condition.

Diuretics, which they are so fond of giving, rather tend to weaken a horse, as they are a source of great irritation, very exhausting, reducing his strength, and act as a serious drain on his constitution.

Regular work, regular times for feed and water, good grooming and ventilation, are far better than unnecessary medication.

It is a good rule, and should be enforced in every stable, that the master be consulted in these matters, as there are few grooms that positively know disease when they see it, and it is often wonderful how horses survive the enormous doses of medicine given them when it is poured down their unwilling throats by quarts.

Even if a horse-owner be so fortunate as to possess a really intelligent, superior servant, who has served his apprenticeship in some good stable, he should insist on being invariably consulted before medicine is administered.

He should acquaint himself with the man's reasons for wishing to administer medicine at all, his idea of the ailment that he supposes exists, of the symptoms from which he diagnoses it, and of the nature and action of the drug which it is proposed to exhibit.

If he sees that the symptoms do exist and that the nature of the medicine is such as would counteract such an ailment, which a very small share of common-sense will enable him to discover, he will do well to sanction the proceedings.

VETERINARY QUACKS NOT ALL DEAD YET.

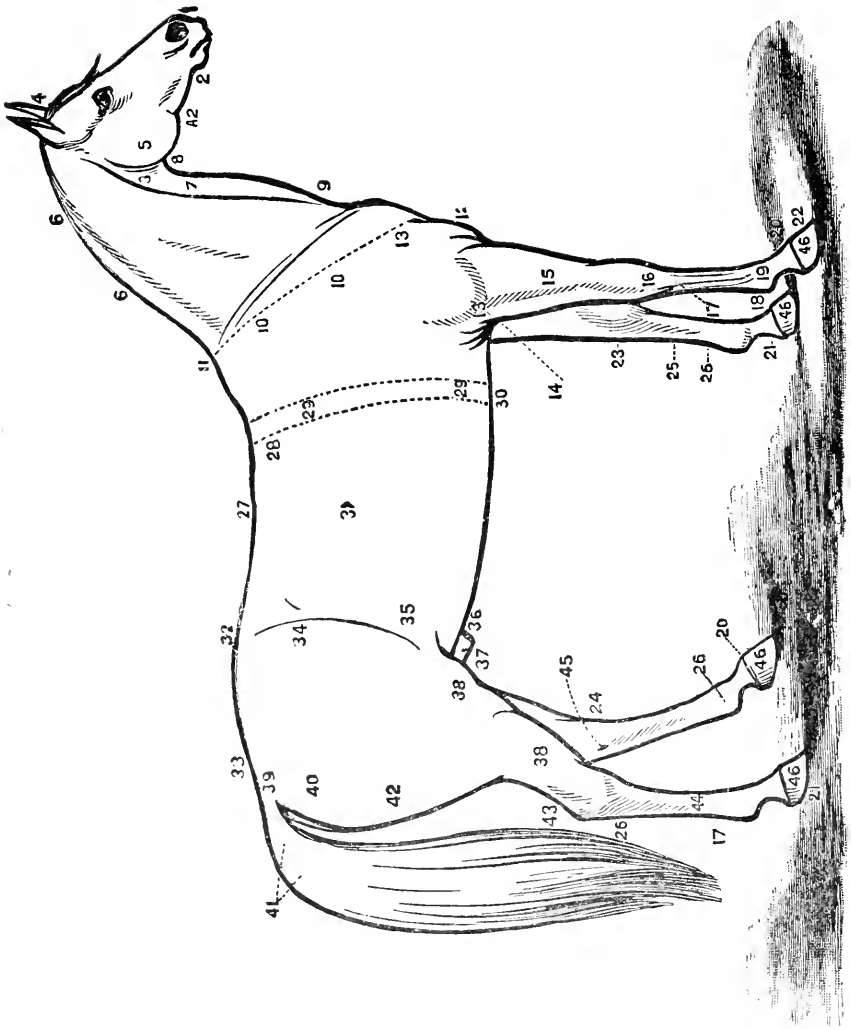
The Portland, Me., *Advertiser* says:

"Dr. Maxwell, the well known veterinary surgeon, was before the municipal court this morning for cruelty to a horse.

It appears that he was called to the city stables to treat a horse suffering from colic. He proceeded to pour into the horse's ears some powerful blistering liniment, with the idea of making the poor beast thrash his head around so vigorously that the violent motion would start the gas which had collected in and around the stomach of the horse.

"The treatment succeeded far beyond the expectations of the doctor. The horse beat his head on the floor in the most acute agony, so that it was necessary to pad the stall with bags to keep him from pounding his skull to pieces. Finally, the horse died a most painful death, and a post-mortem examination showed that his ear was blistered all over the inside in a most horrible manner.

"The defense tried to show that the liquid that was turned into the ear was harmless, but Judge Gould could not be made to believe that story. He fined Dr. Maxwell $20 and costs, for excessive cruelty to the horse."



PRINCIPAL POINTS AND EXTERNAL PARTS, TO BE EXAMINED FOR INJURIES, DEFECTS, AND DISEASES.

1. Muzzle. 2. Place of Fistula from teeth. A2. Place to feel the pulse. 3 Place of Mumps. 4. Place of Poll-evil. 5. Angle of jaw. 6, 6. Chest. 7. Place of Fistula from vein. 8. Throttle, Thropple, or Wind-pipe. 9. Shoulder-point; place of sores from harness. 10, 10. Shoulder-blade. 11. Withers; sometimes the seat of fistula. Height of horses reckoned from the ground to the withers. 12. Front of Chest, Bosom, or Breast. 13, 13. The True-arm (see Skeleton). 14. Elbow; often the seat of tumors. 15. Arm or Fore-arm. 16. Knee or Wrist; may be swelled, having a fungus growth; or the skin may have been broken, evidence of a fall. 17, 17. Back Sinew; place of curb. 18. Place of disease of skin above the Coronet; Crown-scab. 19, 19. Fetlock, or Pastern-joint. 20. Coronet. 21, 21. Heel. 22. Contracted Hoof. 23. Mallenders. 24. Sallenders. 25. Seat of Splint or Exostosis on side of Cannon-bone. 26, 26, 26. Seat of Bursal enlargements 27. Back or Spine. 28. Place of Saddle-galls. 29, 29. Girth, or circumference in measurement. 30. Place of injury from pressure of girth. 31. Barrel or Middle-piece. 32. Loins. 33. Croup. 34. Haunch. 35. Flank. 36. Seat of Warts. 37. Sheath, or prepuce. 38, 38. Gas-skin, or lower thigh. 39. Root of the Dock, or tail. 40. Hip-joint, Round, or whirlbone. 41. Rat-tail. 42. The Quarters. 43. Point of the Hock; seat of Capped-hock. 44, 44. Cannon-bone. 45. Place of Spavin. 46, 46. Hoof.

CHAPTER XLIV.

GIVING MEDICINE.

Best in balls — Dimon's Spavin Cure — Dimon's Colic Remedy — Dimon's Black Oil Liniments — Dimon's Liniments — Condition powder — Leg wash — Symptoms of disease — The pulse — The ears — Membrane of nose — Eyes — Mouth — Breathing — Skin — Flanks — Drooping of the head — Lying down — Pointing with the nose — Pointing with the foot.

IN administering medicines to horses I much prefer to mix it with meal or rye bran and make it into balls and place those as far back in the mouth as possible, rather than to give it in a liquid form from a bottle or horn; and there is more safety and less waste in the ball management. In drenching — as it is called when giving liquid medicine — the horse's head is raised and held up, a bottle is introduced into the mouth, and the liquid poured down. In his struggles there is always danger of some of the medicine being drawn into the windpipe and lungs, and inflammation and fatal results sometimes follow.

In my many years' practice in treating diseases of horses I have found the same remedy to act equally alike on all cases of the same nature, of whatever name the disease may go by; as, for instance, medicine good to heal a sore on any part of the horse, or by whatever name it may be called, is just as effective on one part as another. So it is in bone diseases and many of the internal diseases, however classed and named. I don't wish to be misunderstood in this matter, however; I don't mean the one medicine for sores, bones, and internal diseases.

Consequently, in describing treatment, I have, instead of giving in each similar malady a full and many times different remedy, mentioned a certain liniment, oil, salve, drench, or ball, etc., first being quite sure to have my remedies understood.

For my own future protection I decline to give the public my recipe for making three of the best and most successful remedies I have ever used in my long practice, or have ever known to be used in the practice of others. They are all covered by letters patent, and I cannot afford to give them away; each one is worth in itself many times the cost of this book. My readers shall have access to them, however, at all times during my life, as I shall continue to manufacture and sell them. They are the following:

Dimon's Spavin Cure, put up in eight-ounce bottles, and can be ordered direct from me at one dollar a bottle, with full instructions and directions for use.

Dimon's Colic Remedy, put up in eight-ounce bottles, and retailing at one dollar each, with full directions. In connection with this last-named remedy I wish to state here that I have yet to meet the first case of colic which this medicine, if taken in time, has failed to cure.

Dimon's Black Oil, put up in two sized bottles, and retailing for fifty cents and one dollar. Full directions accompany each bottle.

Now to prove to my readers my own unselfishness in this matter and that I do not wish to advise them to depend wholly on these remedies, notwithstanding my great success with them, I give what I consider, in all cases, the next best remedy.

Of liniments, blisters, ointments, salves, worm powders, and physic balls, there are in existence a great variety; many of which are undoubtedly very good. I shall mention but a few, those being such as I consider well worthy of use.

Liniment. Next to Dimon's Spavin Cure, which I use as a liniment, reduced to any strength desired, I consider the following two formulas the best. I call them Dimon's Own Liniment and Dimon's Stable Liniment. The first is made as follows:

Alcohol, ...	1 gallon.
Spirits Turpentine, . . .	1 quart.
Oil of Cedar, ...	4 oz.
Oil of Hemlock, ...	4 oz.

Oil of Wormwood,	4 oz.
Oil of Origanum,	4 oz.
Iodine,	8 drachms.
Arnica Flowers,	2 oz.
Gum Camphor,	1 pound.

Dimon's Stable Liniment is compounded after the following:

Pure Cider Vinegar,	1 gallon.
Full Proof Alcohol,	2 quarts.
Saltpetre,	4 oz.
Oil Wormwood,	4 oz.
Oil Hemlock,	4 oz.
Arnica Leaves,	2 oz.
Gum Camphor,	8 oz.
Sal Ammonia,	8 oz.
Iodine,	8 drachms.
Spirits of Turpentine,	1 quart.

This is cheaper than the first and makes a most excellent stable liniment.

Dimon's Condition Powders are made as follows:

Jamaica Ginger,	1 pound.
Sifted Hard Wood Ashes,	2 pounds.
Fine Salt,	½ pound.
Powdered Gentian Root,	¼ pound.
Saltpetre,	¼ pound.
Black Antimony,	2 oz.
Annis Seed,	2 oz.
Flour Sulphur,	4 oz.
Powdered Rosin,	2 oz.
Elecampane Root,	2 oz.
Cayenne Pepper,	1 oz.

Mix thoroughly and give in doses of one tablespoonful in feed, twice daily.

Dimon's Leg Wash, which is also a good body wash, can be prepared by following the recipe given below:

Take a three-gallon jug; put in one and one-half gallons of good and pure Cider Vinegar,

1 quart Full Proof Alcohol,
8 ounces Sal Ammoniac,
4 ounces Saltpetre,

4 ounces Arnica Leaves,
4 ounces Gum Camphor,
Then fill the jug with rain water.

You now have ready for use three gallons of as good leg and body wash as can be produced, at a comparatively low price.

Blister Ointment.

Spirits Turpentine, . . .	1 oz.
Sulphuric Acid, ...	2 drachms.

Mix carefully in open space and add Lard, 4 ounces, and Powdered Cantharides, 1 ounce.

A Physic Ball may be made as follows:

Barbadoes Aloes, ...	1 drachm.
Tartar Emetic, ...	1 drachm.
Powdered Digitalis, . . .	½ drachm.

Add syrup enough to form a ball and give every six hours until bowels move freely.

SYMPTOMS OF DISEASE IN THE HORSE.

As the horse is unable to describe his feelings in words, the diagnosis of his ailment is much more difficult to determine than is that of the human family. As a consequence it must be determined by symptoms, and to determine the nature of a disease wholly by external symptoms requires more skill by the practitioner than that of treating the disease afterwards. To be fully successful in treating a disease one must thoroughly understand the nature of the disease which he is attempting to treat. When called upon to see a sick horse I first examine

The Pulse. The pulse of a healthy, medium-sized horse beats about forty times per minute. Size and age determine somewhat the pulse beats, but, as a rule, forty per minute may be considered reliable; any considerable increase over that amount indicates fever or inflammation; and other symptoms may be looked for to determine the particular locality of the disease. When great weakness ensues the pulse becomes slow and fluttering.

The Membrane of the Nose. In health, this is of a light

pink color; in fever and inflammation it is red. If the lungs or air passages are affected it is more deeply colored and specked with brown mucus. In glanders it is of a light blue and reddish color, with specks of ulceration over it. In scarlet fever it is covered with scarlet spots; in the very last stage of disease, when death is near at hand, the membrane of the nose becomes of a dark leaden or livid color.

The Ears in disease lose their erectness and quickness of motion, becoming loose and flapping. In inflammation of the lungs they become quite cold, and slightly so in other diseases.

The Eyes present a weeping appearance in colds, fevers, and glanders; when they become glassy in the advanced stages of disease it indicates that death is about to take possession of the patient.

The Mouth is hot in fevers and inflammation. Both the mouth and tongue are clammy and often quite offensive in smell in severe fevers.

The Breathing is rapid in fevers; quite laborious in inflammation of the lungs; laborious, short, and catchy in pleurisy. In the second-named disease the nostrils are quite spread, and in pleurisy the breath is hot. Deep, heavy, and snoring breathing indicates disease of the brain.

The Skin. Heat of the skin denotes fever, while a dryness of the skin and hair indicates some acute disease already present or just coming on.

The Flanks heave in inflammation of the lungs, pleura, and bowels, while they are tucked up in glanders, farcy, indigestion, and some other diseases. The flanks throb in thumps.

Drooping of the Head is a sure sign of a sick horse, but may represent a variety of diseases of different characters; but when it is observed other symptoms should be looked for.

Lying Down. In colic the horse will lie down often; rolls and tries to keep on his back; gets up quickly and is soon down again. In severe cases he lies down quickly, rolls over several times, and gets up or partially rises and sits for awhile like a dog, and then rolls again or gets up. In locked-jaw he

stands wide and as fixed as a statue; in inflammation of the lungs he stands with his fore-feet well forward and dislikes to move at all or to lie down.

Pointing with the Nose. The horse points with his nose to the flanks in cases of inflammation of the bowels and colic. In cases of inflammation of the feet or acute founder he points to his feet with his nose.

Pointing with the Forward Foot indicates sweeney founder or a troublesome corn; while dragging the forefoot shows dislocation of the shoulder joint.

CHAPTER XLV.

HORSE AILMENTS AND HOW TO DOCTOR THEM.

Bone spavin — Bronchitis — Brittle hoof — Blindness — Blistering — Bots — Cataract — Contraction of hoof — Colic — Capped hock — Curbs — Cough — Corns — Distemper — Diarrhœa — Drying the sweat — Fever — Fistula — Founder — Fits — Fractures — Galls — Glanders — Slings.

BONE SPAVIN.

BONE spavin is a deposit of bone on the inside and at the lower part of the hock, about at the union of the cannon-bone with the small bones of the hock, forming a hard tumor of greater or less size. It produces complete stiffness of the bones between which it occurs.

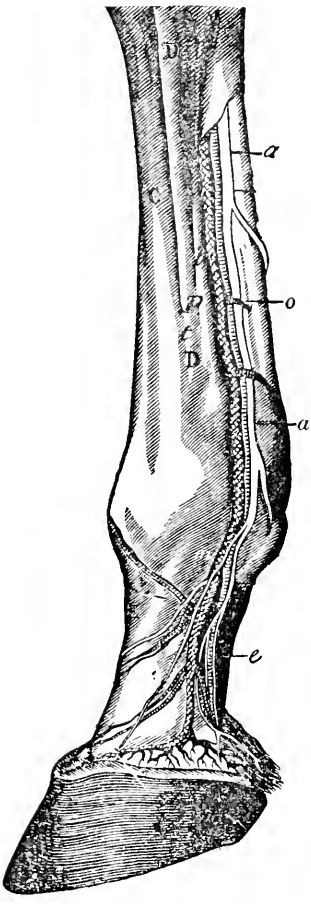
SPAVIN.

BOG SPAVIN.

Symptoms. Many of the earlier symptoms may entirely elude detection, and the affection may not be observed until it has gained a firm hold; especially so is this true in reference to horses that have very prominent hocks and are what some horsemen call "double-jointed."

1. Caries of the lower jaw.
2. Fistula of the parotid duct.
3. Bony excrescence or Exostosis of the lower jaw.
4. Swelling by pressure of the bridle
5. Poll-evil
6. Inflamed parotid glar
7. Inflamed submaxillary
8. Permanent protuberance produced by pressure of the collar
9. Fistula in the withers
10. Saddle-gall
11. Tumor of the elbow
12. Induration of the knee.
13. Clap of the back sinews
14. Malanders.
15. Splint
16. Rug bone
17. A Tread upon the coronet.
18. Quitter
19. Sidderack
20. Contracted or Ring foot of a foundered horse.
21. Capped hock
22. Mallenders
23. Spavin
24. Curb
25. Swelled sinews
26. Thick leg
27. Grease
28. A crack in front of the foot, called cow-crack.
29. Quarter-crack
30. Ventral hernia
31. Rat tail.

When spavin is forming the first thing to attract attention will probably be lameness, which may be slight at first, but will very soon develop into that of a very serious character. When this is observed, a careful examination and comparison with the opposite hock joint soon determines its nature, as an unusual degree of heat and tenderness in the region of the inner splint bone will be found.



Showing nerve, artery, and vein
e. Vein; *o.* Artery.

Treatment. Various veterinary surgeons have asserted that this disease cannot be cured, and that a spavined horse will always remain the subject of it, and therefore, unsound; but, practically, I know better, as I have, myself, invented and patented a medicine used by myself for the past twenty years or more that I will guarantee, if taken in time, will not only perform a perfect cure from all lameness, but will leave the spavined joint as smooth as the other, and without a scar.

I could (had I taken pains to do so), have had numerous affidavits to publish in this book as to the permanent cures of bone spavin produced by "Dimon's Spavin Cure."

As to its general efficacy I must, for the benefit of my readers, give a few Canadian testimonials, all occurring the same season. They are as follows:

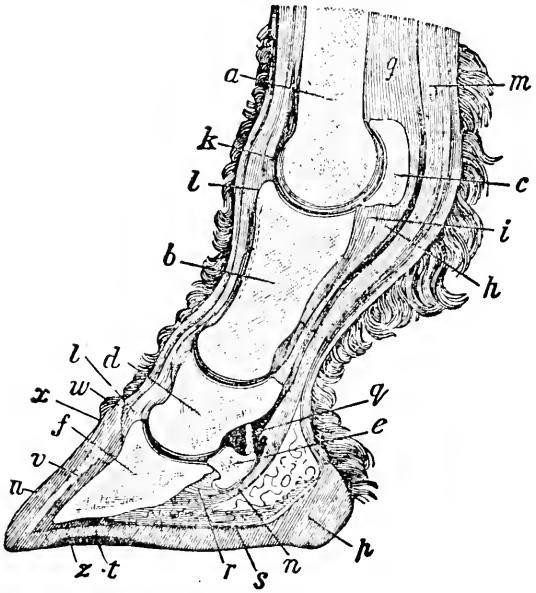
"WALKERVILLE, ONT., March 25, 1885.

Having had charge of the horse stock of the Essex Stock Farm of Hiram Walker & Sons, located here, for the past year, and with all the large stock

on said farm (consisting of about 150 head), have had many quite stubborn cases of spavins, curbs, splints, etc., but have found none but that with a proper application of Dimon's Spavin Cure, used according to directions, I could not cure. It cured the imported stallion "Marquis," valued at $1,500, of a very large bog spavin of long standing, that had been treated for years by veterinary surgeons without doing it any good.

I can recommend this "Dimon's Spavin Cure" for all cases of spavin, curbs, splints, ringbone, etc. J. J. DIMON."

CUT OF THE PASTERN AND OTHER BONES, LIGAMENTS, ETC.



a Shank-bone.
b Upper and larger pastern-bone.
c Sessamoid-bone.
d Lower or smaller pastern-bone
e Navicular or shuttle-bone.
f Coffin-bone, or bone of the foot.
g Suspensory ligament inserted into the sessamoid-bone.
h Continuation of the suspensory ligament inserted into the smaller pastern-bone.
i Small inelastic ligament, tying down the sessamoid-bone to the larger pastern-bone
k A long ligament, reaching from the pastern-bone to the knee.
l Extensor tendon inserted into both the pasterns and the coffin-bone.

"WALKERVILLE, ONT., March 25, 1885.

Having had care of the horses and colts for Hiram Walker & Sons of the Essex Stock Farm for a year, I wish to state that I have cured no less than five spavins during that time by the use of Dimon's Spavin Cure alone,

used according to directions. I can most conscientiously recommend it as the best medicine in use for this purpose. I have also witnessed its beneficial effects on splints, curbs, etc. CHAS. J. STODGELL."

"WALKERVILLE, ONT., March 28, 1885.

I am a coachman for E. C. Walker, Esq., of this place, and have charge of his horse-stock. Having had occasion to use Dimon's Spavin Cure in this stable, I can cheerfully recommend it as doing fully all that is claimed for it by the inventor. JOHN WETTON."

"WALKERVILLE, ONT., April 11, 1885.

Mr. Dimon: — I have much pleasure in advising you that the bottle of Spavin Cure given me by you was used on a mare's shoulder and completely removed a stubborn callous in a week, which had been treated in various ways without producing the desired effect. J. D. DAVIS,

Inspector of Distilleries."

BRONCHITIS.

This is an inflammation of the mucous membrane of the bronchial tubes, or large division of the windpipe. It frequently prevails in an epidemic form and may leave a horse with a chronic cough.

Symptoms. At first the symptoms seem much the same as a common cold, but more severe. There is a cough and evident soreness of the throat and usually considerable fever; mouth and nose are red, breathing hurriedly and thick, pulse quick and wiry.

Treatment. First, the horse should be treated as for a fever. Place the subject in an open or airy place embraced by the word "comfortable." Of course it would not be comfortable to place a sick horse in an open shed in zero weather; neither would it be comfortable for a horse to be placed in July, while suffering from a high fever, in a close stall and burdened with blankets.

Give fifteen drops of the tincture of aconite root every four hours until six doses are given if necessary. Give plenty of cold water to drink, for pain and fever require plenty of fluid, as all the secretions are dried up. Relax the bowels and cool the stomach with green grass if it is in season, but if out of season for grass then give bran mashes, in which put steeped

flax-seed or oil meal, one pint to a feed. On the second day, if necessary, give the following medicine:

Powdered gentian root,	2 ozs.
Powdered nux vomica,	1 oz.

Mix, and divide into six powders, and give one morning, noon, and night.

BRITTLENESS OF HOOF.

A disease arising from keeping the hoof too dry, although it is a natural defect in some horses. It prevails most in hot, dry weather, and is sometimes quite a serious incumbrance.

Treatment. Once, having a highly-bred and otherwise valuable mare subjected to this disease, I succeeded in accomplishing a complete and permanent cure by the use of a hoof ointment of my own origination, and manufactured and composed as follows:

Fish oil,	1 qt.
Oil of Tar,	1 pt.
Lard and verdigris,	equal parts.

Both together making one pint.

Apply daily to a clean foot and rub over the whole crust and sole. The mare thus cured was known as Fannie Kenyon, and was the dam of Col. Sprague (see Wallace's Trotting Register), by Sprague's Hambletonian, son of Alexander's Abdallah, the sire of Gov. Sprague, 2.20½, erroneously credited to Rhode Island.

BLINDNESS.

It has been said of man that his eyes were the windows of his soul; they are surely, in the horse's case, the windows through which he looks into the world. How sad to have them forever closed. Blindness may be, in a measure, hereditary, but it is by no means an affection to which the horse is liable in a state of Nature. It is impossible to calculate the influence of bad management in producing blindness; but when once a horse has become "stone blind" there is certainly no cure, and I doubt if we can do anything to even partially restore his sight. We can but treat such an unfortunate creature with the utmost care and tenderness. Blind horses often perform their work as well as others, and continue in it for many years.

BOTS.

The bot is a small yellowish grub or worm which may be found fastened to the inner coat of the upper part of the horse's stomach, from the fall until the next summer, or for a period of from ten to eleven months, — in such horses as run to grass or are exposed to the bot-bee in the late summer and early autumn. They are produced by the hatching of the eggs laid and glued on the hair of the horse by the bee, and which get into the mouth, and are hatched in the stomach; but, notwithstanding all that has been said and written about the bot worm, and notwithstanding the number of horses' lives sacrificed by ignorant doctors in endeavoring to kill bots in cases of colic and other severe internal diseases, I don't believe for a moment that the horse ever yet lived that has been killed or materially injured by bots.

No matter what disease a horse dies of, the stomach often congests quickly and then ruptures; now some persons in opening such cases and finding the stomach ruptured and bots in the abdominal cavity, look no further for the cause of death, but jump at the conclusion: "bots have eaten through the stomach and killed the horse."

The best books on the diseases of the horse say that bots do little if any harm; and the man of all others who made the different kinds of bot flies and grubs a special study (Bracy Clark, V. S.,) thinks they do rather good than harm. One thing is certain, there is but one thing to be done, and that is, to let them alone. There are probably more mistakes made in the treatment of horses supposed to be suffering from bots than for any other complaint whatever.

In my thirty years' experience as a horse doctor, I have been called to prescribe for quite a number of horses supposed to be afflicted with bots, but never lost a horse by death from this cause. The reason for this exemption from loss has arisen, I firmly believe, from the fact that I never dosed them with poisonous mixtures so much in favor with drivers and hostlers.

BLISTERING.

When it is decided to blister any part, the hair should first be cut off as closely as possible; the blister ointment is then rubbed in with the hand for ten minutes, leaving a good quantity smeared on the outside. If the legs are to be blistered the heels should be protected by lard.

Blistering is sure to cause itching after two or three days, and great care should be taken that the animal does not gnaw the part to such an extent as to cause a serious blemish.

Blisters may be composed of several different ingredients, of which the following remedy is, perhaps, as good as any.

Biniodine of Mercury, . . .	1 drachm.
Lard, ...	1 oz.
	Mix.

In my practice I have not put a blister on a horse for upwards of ten years; but for spavins, curbs, splints, etc., where others think necessary to blister, I use Dimon's Spavin Cure instead, with uniformly better results. The latter acts as a sweat blister and does all that the blister will do and does not take off the hair.

CATARACT.

There are two species of cataract of the eye of the horse: one by a diseased condition of the lens, and the other a formation of a false membrane over the lens; either of which is liable to produce blindness.

Symptoms. Cataracts are unlikely to be discovered by the careless owner or groom until a difficulty of vision is made obvious by the horse exhibiting the usual indications of blindness. It usually commences by a speck like a ray of the sun in appearance, forming on the lens of the eye, seen through the pupil either at its center or its upper or lower edge. This speck is liable to increase until it entirely covers the pupil, causing it to appear of a uniform whitish color, and producing complete blindness.

Treatment. Veterinary surgeons fail to agree as to the curability of cataract, or rather, as to the propriety of operating

for it. There are two different operations; one is called "extirpation of the lens," and the other is called "couching." I consider the former quite useless and the latter of doubtful utility. In either case, none should attempt to perform the operation save an experienced oculist. Perhaps the best thing generally to be done is to give laxative and cooling food, with not too strong light.

CONTRACTION OF THE FOOT; OR, HOOF BOUND.

Contraction in this sense is the drawing in of the heels of the walls of the hoof — the hoof becoming more erect, the lower part or bottom becoming smaller in circumference, and the frog diminished in breadth. It is caused by improper shoeing, founder, or thrush.

Treatment. To effect a permanent cure there is nothing so good as to remove the shoes, turn the horse to grass, and let nature do the rest; but in cases where this cannot be afforded, then the next best thing must be done, which is — remove the shoes, thoroughly cleanse the feet with soft soap and warm water and adapt to each a piece of soft sponge just the size of the sole and keep this well saturated with tincture of arnica or good liniment. This sponge should be well secured to the foot by proper bandages, and the horse should stand on the ground, should have light and cooling food and bowels kept well open.

In case the horse with contracted feet must be kept steadily at work, then one must have him shod long and wide at the heels, without calks, and then possibly spread the heels by artificial appliances (although, as a rule, I am a strong opponent to nearly all artificial appliances connected with the horse), and have him, if possible, so shod as to allow the frog to come to the ground. Renew the shoeing as often as once in three weeks, nailing on one side only; and never, in any case, allow the frog to be interfered with by the shoer. The feet should be stuffed every night with oakum well saturated with tincture of arnica in cold water — eight ounces of arnica to one gallon of water — or this may be profitably alternated with a poultice

of soft soap and rye or linseed meal applied cold. Never, in any case, apply cow-manure to the foot of the horse, although an old-time remedy during those days when bleeding was recommended in nearly all cases and cold water withheld from the fevered patient.

COLIC.

There are two kinds of colic, known as flatulent and spasmodic, of which flatulent or wind colic is the most frequent. It is a very distressing disease, but of short duration — the patient either getting well or dying within a few hours at most.

Symptoms of Flatulent Colic. The horse becomes restless or uneasy; commences pawing, and shows signs of pain. As the pain becomes more severe he looks around at his side; walks about anxiously; lies down carefully; rolls; shows an effort to keep on his back; gets up carefully; walks around, and for a time seems better, but the paroxysm is soon renewed and he behaves as before, the pain evidently becoming more severe. The belly becomes swelled, caused by the wind or gas collected in the bowels. This species of colic is chiefly produced by indigestion, and it will generally be found that horses most subject to colic are gross feeders.

Treatment. After placing the patient in a roomy, well-littered box-stall, give at once a dose of Dimon's Colic Remedy as per directions, and repeat if necessary, according to directions. I have used this never-failing remedy — when taken in time — for the past fifteen years, and have yet to lose my first patient.

In the absence of Dimon's Colic Remedy, which should always be on hand, give one-half pint of saleratus dissolved in one pint warm water, as a drench; and give an injection of warm soap-suds with three spoonfuls cayenne pepper and three spoonfuls molasses dissolved in it. Then, if necessary, give an anodyne drench, composed of

Linseed oil, ...	1 pint.
Oil of turpentine, ...	2 oz.
Laudanum, ...	2 oz.

Mix, and give every hour until relief is effected.

An anodyne ball for colic, in mild cases only, may be prepared after the following formula:

Powdered opium,	2 drachms.
Castile soap,	2 "
Camphor gum (pulv.),	2 "
Ginger,	2 "

Make into a ball with licorice powder and treacle, and give every hour until relieved.

SPASMODIC COLIC.

While most writers on veterinary subjects describe all kinds of colic under one general name of "colic," my long experience in veterinary practice teaches me that colic should properly be divided into two classes. Spasmodic colic differs from common wind colic very essentially, inasmuch as spasmodic colic is a disease of the bowels, characterized by frequent and repeated spells of violent cramping.

Symptoms. Spasmodic, like wind colic, is sudden in its attack, and no previous symptoms give warning of its approach. As in wind colic, the horse commences pawing, striking his belly with his feet, looks at his side, and soon lies down. In spasmodic colic he lies down very quickly and gathers his legs under, as if he would like to get down flat on his belly. He rolls rapidly and does not seem disposed to get on his back, but rolls clear over; gets partly up and sits on his haunches, etc. There is no swelling of the bowels in this kind of colic.

Treatment for Spasmodic Colic. I have but one treatment for this disease, and have never lost a case when taken in time.

I always use Dimon's Colic Remedy and always keep it on hand, and would advise every horse owner to do the same; not simply for the slight revenue it would yield to me, but for the greatest good of the horse and his owner. Give this remedy according to directions accompanying each bottle, and save your horse every time.

I will also give what I consider the next best remedy, which is as follows:

Spirits turpentine, ...	4 oz.
Linseed oil, ...	12 oz.
Laudanum, ...	1½ oz.

Mix, and give every half hour until relieved.

CAPPED HOCK.

This is a swelling of a soft character appearing on the point of the hock where the great tendon — called the hamstring — is attached to the upper bone of the hock. It consists

A CLEAN HOCK.

A CURBY HOCK, SLIGHTLY BULGING OUT BEHIND.

A CURB.

of the enlargement of one of the little sacks situated near where the tendons are attached, and is of precisely the same nature as wind galls and thoroughpin. In some cases they become hardened after remaining for some time, but seldom do they produce lameness. They are caused by blows, kicks, or other violence to the points of the hocks.

Treatment. First soak with hot water — not scalding hot; then apply Dimon's Spavin Cure according to directions, and repeat until a cure is effected. In the absence of this remedy the next best thing, perhaps, is applications of a strong liniment like Dimon's Own Liniment, which anyone can make. See directions, page 346.

CURBS.

When a horse springs a curb, on its first appearance let up in his work, but give him some exercise; don't think you must keep him entirely quiet, but be careful not to over-drive or over-draw for some time, but jog or give him liberty to exercise himself and treat him at once. First get the inflammation down by applying hot water and some mild liniment rubbed

well into the hair; then apply Dimon's Spavin Cure, that being the best of anything I know, but if that is not at hand or easy to procure, then apply other spavin cure or strong liniment containing iodine.

I have always found curbs, as well as spavins, to yield readily to the above-named Spavin Cure.

A curb is among the least objectionable forms of unsoundness. A crooked or curby-shaped hock is no more likely to develop actual curbs than a perfectly straight one.

I prefer to use this Spavin Cure to blistering, for while it does not make a sore like a blister, it acts as a sweat blister, opening the pores and forming a scurf.

COUGH IN HORSES.

Coughs in horses, from distempers, colds, or whatever cause, often become chronic, but may be successfully treated as follows:

Spirits turpentine,	2 oz.
Gum guaiacum,	½ oz.
Mucilage of acacia,	6 oz.
Laudanum,	4 oz.
Water,	2 quarts.

Mix, and give half a pint as a drench every night; shake bottle well before pouring out.

A ball may be made for bad colds and coughs not yielding to milder treatment, as follows:

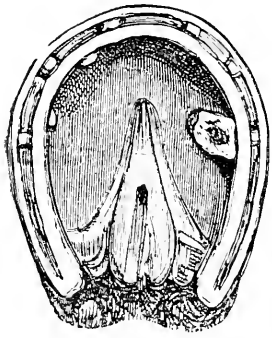
Nitrate of potassa,	2 drachms.
Tartarized antimony,	1 drachm.
Powdered digitalis,	½ "
Gum camphor (pulv.),	½ "

Make into a ball with linseed meal and boiling water.

Another remedy in the following will be found:

Lobelia, powdered,	1 oz.
Cayenne pepper,	1 oz.
Ginger,	2 oz.
Elecampane root, powdered,	2 oz.

Dose, one tablespoonful once a day.



FOOT SHOWING CORN.

CORNS.

A corn is a bruise of the sensitive sole, its seat being in point of the sole in the angle between the wall and the bar, and almost always found on the inside of the fore foot.

Treatment. Have them pared out and the cavity filled with pine tar; then shoe with either bar shoes or with common shoes with a leather sole under them between the foot and the shoe.

DISTEMPER.

Distemper is the usual name applied to all forms of common epidemic that usually proves contagious, going through the stable; it may prevail in different degrees of severity, from a slight cold to a dangerous influenza.

Symptoms. The prevailing symptoms are shivers, cough, and staring coat, failing of appetite and high fever; also a swelling of the legs and about the head and neck — the throat being the most dangerous part. The nose discharges a yellowish substance, sometimes quite offensive to the smell, but if it runs freely, so much the better.

Treatment. Keep warm and clean; give aconite, fifteen drops at a time in a little water, every two hours when the fever is moderately high; but, in severe cases, give aconite as often as once in a half-hour for a while.

For swollen throat caused by distemper, bind burdock leaves steeped in cider vinegar under the throat; apply hot. I have also found the following treatment for colds and distemper quite beneficial:

1 pint good whisky.
2 ounces capsicum.
2 ounces oil spikenard.

Mix, and apply twice daily, externally, on the glands of the throat.

In my own practice I use Dimon's Spavin Cure diluted with water, and applied as hot as can be borne. I find this gives

me better results than I obtain from the use of any other application with which I am familiar, and this is a disease with which I have had much experience in treating.

Give a ball twice, daily, composed of

4 ounces chloride of potash.
4 ounces carbonate soda.
2 ounces powdered rosin.
2 ounces anise seed.
½ ounce black antimony.

Add one teaspoon of this powder to two ounces molasses and linseed meal enough to make a ball.

DIARRHŒA OR SCOURS.

This means a too frequent operation of the bowels, the discharge being changed in appearance from their natural condition. Such cases generally succumb to rest and some attention to diet; but in severe cases I would recommend the following:

Treatment. Take

Rhubard, powdered, . . .	1 oz.
Ginger, powdered, . . .	4 drachms.
Opium, powdered, . . .	1 drachm.
Prepared chalk, . . .	4 drachms.

Mix, and divide into three parts, and give one dose every three hours until cured.

Give plenty of water to drink, which will greatly assist to allay irritation or what disposition there may be to inflammation. Bran mashes should be given for a few days. To overcome the effects of so much drying medicine, oil meal or ground flaxseed would be an excellent assistant in this particular.

SCOURS IN YOUNG COLTS.

Young colts from various causes are sometimes attacked with scouring.

Treatment. Tannin tea or tea made from the inner bark of the white oak tree is a sovereign remedy for scours in young colts; it is also good for older animals.

DRY UP THE SWEAT.

A sudden drying up of sweat when the horse is being driven or worked indicates the near visitation of lung trouble, as inflammation or pleurisy.

FEVER.

The subject of fever is one that has perplexed the minds of medical men for ages, and I do not propose in this work to examine the different theories heretofore advanced. I only propose to give what seems to me a reasonable explanation of it.

Fever is an increase of the heat or temperature of the animal body. When in full health — although there are several sources of heat in the body and as many agencies operating on it of a cooling nature — there is never a change in the temperature of any consequence; not in the extreme, it is said, to over one or two degrees. Consequently, when this temperature or animal heat becomes increased, that unhealthy condition called fever exists.

If such increased heat were to continue the life of the animal would soon be destroyed. Navin, in his excellent work, the "Explanatory Horse Doctor," mentions the varieties of fever among horses as "simple scarlet fever," "malignant scarlet fever," "typhus fever," "putrid fever," and "catarrhal fever or influenza."

Treatment of Fevers in General. Fever should not always be treated as a disease of itself, for in the majority of cases it is only symptomatic of some local or general derangement. More or less fever will be found in all cases of inflammatory character; therefore, we should not let the fact of the presence of fever so engross our attention as to overlook the real malady.

A fever as a disease may be regarded, when fairly seated, somewhat as "self-limited." That is, running a regular course up to a certain intensity, and then, all things being favorable as regards the patient's previous health, management, etc., the unfavorable symptoms gradually subside and the patient convalesces into a normal condition.

I first give a mild dose of physic, followed by ten to fifteen drops of the tincture of aconite root two or three times in twenty-four hours, and allow plenty of pure air and cold water.

Keep the patient as comfortable as possible as regards temperature, and not expose to drafts or severe cold in winter or to too close confinement and heat in summer. Discretionary judgment should be used as to what may be comfortable for the animal under treatment at all times and in all cases.

The following mixture may be given once in twenty-four hours:

Spirits of nitrous ether,	1 oz.
Niter,	4 drachms.
Tincture of ginger,	2 drachms.
Camphorated spirits,	6 ozs.

FISTULA: ALSO CALLED THISELO.

Fistula is an abscess occurring about the withers of the horse. It usually appears at one side of the withers, generally forward, at about the place where the collar rests, but sometimes as far back as where the saddle rests; or it may locate at any joint between those places. Fistula, like poll evil, is regarded as of scrofulous origin.

Treatment. While there are various treatments for this somewhat troublesome and annoying disease, my observation, experience, and practice teach me that in cases where the fistula is decidedly established the following treatment is as good as any.

First put a seton in at the lowest possible point in order to run off all accumulated matter. Bathe outside with Dimon's Spavin Cure or liniment. In severe cases it may be cut into and a solution of chloride of zinc diluted with water — one drachm of this to a pint of rain water, to be used as a syringe.

ACUTE FOUNDER.

Everyone is familiar with the word founder when applied to a lame horse, yet but few horsemen, even, comprehend the nature and seat of the affection.

HORSE IN SLINGS.

Founder in all its forms is inflammation of the leaves which dovetail into each other, and bind the sensible and insensible portions of the foot together. It is called by some fever in the feet. But, regardless of names, this disease is of frequent occurrence, and, when let alone, destroys many good horses by leaving them ever afterwards sore and "tender forward."

Symptoms. The horse will scarcely move. He stands upon his heels, with fore feet and legs stretched out as far as he can get, to throw the weight off them; thus, to all appearance, making him hollow in the chest, which appearance has given rise to the idea that the chest is the seat of the disease, hence the term "chest founder." The hind legs are brought as far forward as possible; the head is held erect and high. The animal is quite feverish, externally excitable, and breathes fast and laboriously, altogether presenting a picture of great distress and suffering.

Causes. Giving cold water when overheated and tired from overwork; a tendency in the feet to take on inflammatory action; the animal not in proper health or condition to perform heavy or fast work.

Treatment. Place the horse in a comfortable box stall with plenty of good, clean, soft bedding to encourage him to lie down, which will relieve him very much. Give twenty drops of the tincture of aconite root in a cup full of cold water to allay the fever, and repeat this every four hours until six doses have been given. Bathe the fore legs in hot water, as hot as can be used without scalding, then bandage with woolen. (See instructions for bandaging in Chapter XXXV, p. 278.)

Clean out and cleanse the bottom of the fore feet and fill the hoofs with hot lard and hold them up — one at a time — until it cools. After this the feet may be poulticed with linseed meal, into which may be added and stirred two ounces tincture aconite root and two ounces extract witch hazel to each poultice. Allow perfect rest for a few days and feed lightly. If the inflammation should remove to the lungs, it should be treated as lung fever.

FITS.

This is a disease occasionally occurring in the horse and resembling the common fits in the human family.

Symptoms. The horse stops, trembles, looks vacantly around him, staggers, and falls, or falls suddenly. The convulsions that follow are sometimes slight, but at other times are terrible; they usually pass off in a few moments, and the horse gets up and proceeds as if nothing had happened.

There is another variety of this disorder called "running fits," which, when attacking a horse, he will run for perhaps a mile or two for all that he is worth. Still another kind is called "kicking fits," which causes a horse to kick as if kicking for dear life, and this class I consider the most dangerous of all. I have owned horses subject to all the above variety of fits, but know of no cure for them. My invariable treatment for fits of all kinds is, first chloroform, then bury.

FRACTURES OR BROKEN BONES.

Fractures are liable to occur in any of the bones, but most frequently in the long bones. Experience has established the fallacy of destroying all horses that meet with a fractured limb. But while fractures are serious injuries, they should never be considered out of the reach of rational treatment.

Fractures may occur in any bone of the limbs or body, and yet a perfect union of the parts may take place, especially so if the fracture is a simple one; compound fractures, even, are occasionally united.

I shall only give here the general principles to be observed, without describing particularly each fracture. This being done, almost any person of good common sense and a little ingenuity may reduce and bandage any fracture. First ascertain the nature and extent of the fracture, and then prepare the proper splints and bandages.

The splints may be made of wood, hollowed out with a gouge, so as to fit the part to which they are to be applied; or a number of narrow splints may be used, being notched about

two inches or so from the end and tied together with twine, three or four knots being tied between each to keep them apart. Several bandages of heavy muslin — cotton sheeting — are to be prepared and rolled up. A quantity of starch prepared, to soak the bandages in, or, what is better, a quantity of comfrey-root, grated down into mucilage. The fractured or broken ends of the bone are then to be brought together in their natural position. After which coat the limb with the prepared paste or mucilage by spreading the preparation on a cloth and then bandage the leg with several thicknesses of the rolled muslin. Then apply the splints in the proper place to keep the fracture perfectly in place. Apply the splints and then tie a twine around the middle sufficiently tight to hold the fracture firmly in place; then tie the cords at the ends of the splints. After this dressing the limb will be thoroughly encased in a hard shell.

Should the fracture be in the small or lower part of the leg, sole leather, softened in water and moulded to the limb, retaining it in place by bandaging, forms a very good splint. The horse, especially if high strung and nervous, should be kept upon his feet by tying up the head short for several days before the slings are placed under him; for if this is done at first, the animal, being fractious, throws himself off his feet, and all efforts to remedy the fracture may prove a failure. From six to eight weeks, according to the age of the animal, are necessary to complete the union of the parts. The animal should be kept mainly on mashes and green food during the treatment.

When the bone becomes properly knit together the hoof will become warm and the horse will be inclined to use the limb. The bandage may then be taken off, but the horse should be very carefully used for some time. As to the slings and the best method of use, see cut on page 368.

HARNESS AND SADDLE GALLS.

This at first is an inflamed tumor resulting from being bruised on the back, which, if neglected and repeatedly bruised, may develop into a very troublesome sore, and quite difficult to heal.

Treatment. My own invariable and most successful remedy (after first removing the cause) is to cleanse with castile soap and water, and then apply Dimon's Black Oil with a feather, and continue this at intervals until a cure is effected.

In the absence of this great remedy the following lotion or ointment may be quite successfully used.

Lotion: Take the inside bark of white oak boiled in an iron kettle until it is quite black; when boiling, drop in a piece of alum the size of a hen's egg, and to a gallon of this add a pint of proof alcohol and four ounces each tincture of arnica and camphorated spirits. When thus prepared, bottle for use, and you will have a good lotion for all galls to which your horses may be liable, and this will be found to be quite handy to keep — bottled up — in the stables. This makes a cheap and handy lotion, but by no means equal to the Black Oil. Apply with a sponge.

Ointment: The above-mentioned ointment may be prepared after the following recipe:

Lard, one pound.
Spirits turpentine, one pint.
Oil tar, three tablespoonfuls.
Oil sassafras, one dessert spoonful.

This ointment is also good for mange and tail rubbing.

COLLAR GALLS AND SORE BACKS.

This is of the same character as the saddle gall, and which, if neglected or badly treated, will leave a scar or lump easily irritated by the collar, and thus be a source of permanent annoyance.

Treatment. Use Dimon's Black Oil, applied with a feather, according to the directions with each bottle; or, in the absence of that, a lotion as follows may be prepared:

(See recipe given for Saddle Galls, just above.)
Tannin in solution, one pint.
Strong tea of arnica flowers, one pint.
Alcohol, one-half pint.
Treat same as for harness galls, which treatment see.

GLANDERS.

Of all diseases to which horseflesh is heir, this is universally acknowledged to be the most fatal, as well as the most loathsome.

Symptoms. The first appearance of glanders is a dry but not staring appearance of the hair; the flesh wastes away rapidly on dry food, but will return again temporarily on brewer's grain, or soft, nutritious food; but soon, however, the hair becomes staring and the horse begins to exhibit indications of failing strength and vitality. The next and most characteristic symptom will be a discharge from the nostrils of a lighter or paler color than that of common cold; not so profuse but of a more glutinous or sticky character, generally affecting but one nostril, and this is usually the left one. The discharges are somewhat offensive, and the further advanced the case is the more so it becomes. As Mr. Navin says: "After the disease has progressed to what might be termed the second stage, the discharge from the nose will be streaked with pus or matter, and in examination, the membrane of the nose will present a dark purple hue, or even a leaden color, widely differing from the pink blush of health or the fiery red of fever in inflammation."

The breathing now becomes more affected, generally accompanied by some cough; the hind legs swell, and the powers of life give way, and death finally claims his severely-punished victim.

Treatment. When the diagnosis of this case is fully confirmed, as it is undoubtedly highly contagious both to the horse and to man himself, the patient should be destroyed at once. By the use of green food and good care his life may be prolonged for a time, and he may be able to accomplish a cer-

tain amount of work; but the risk of contagion is too great to be incurred, and no man who regards his own welfare and that of his neighbors should keep a glandered horse.

GANGRENE.

This is a synonymous term for mortification or death of a part, and is characterized by a livid or black color. Gangrene is attended, or is ushered in, by a sudden cessation of pain, which has often been mistaken for recovery.

When gangrene of an external part takes place there is a material change in the condition of the part and it assumes altogether a different aspect; the swelling subsides, and on touching the part a crackling sound is produced, owing to the evolution of gas.

CHAPTER XLVI.

HORSE AILMENTS AND HOW TO DOCTOR THEM. — *Continued.*

Heaves — Inflammations — Indigestion — Lameness — Lampas — Lung fever — Lice — Locked-jaw — Mange — Proud flesh — Pleuro-pneumonia — Poll evil — Quittor — Roaring — Ringbone — Scratches — Stumbling — Shoe-boil — Slavering — Setons — Strains — Sprains — Surfeit — Splint — Stocking — String-halt — Sweeney — Thrush — Tumors — Tail rubbing — Thick water — Thoroughpins — Thumps — Wind galls — Worms.

HEAVES.

A VIOLENT heaving action of the ribs and flanks as the air passes out of the lungs is known by the name of heaves, broken-wind, and thick-wind. It is very similar to asthma in the human patient, but the asthma in man only occurs in paroxysms or spells, whereas in horses it is constant, especially so when the horse is exercising.

When an animal is suffering from heaves or broken-wind there is a peculiarity of breathing which cannot be mistaken, particularly directly after violent exercise. The air is drawn into the lungs in less time by a heavey horse than by a sound one, and with perceptible degree of labor. The effort of expelling air is accompanied by a peculiar difficulty which requires a double effort, in the first of which, as described by Mr. Blaine, the muscles operate and the other auxiliary muscles, particularly the abdominal, are put on the stretch to complete the expulsion more perfectly; and that being done the flank falls, or the abdominal muscles relax with a kind of jerk. From this peculiarity of breathing the name heaves has been given. The disease is generally preceded and accompanied by a cough, perfectly characteristic, and by which an experienced horseman would detect the disease in the dark.

When the disease has become established there is no possi-

bility of a cure, for the ruptured cells can never be repaired. Much may be done, however, to ward off the disease and to alleviate it. More depends upon the food and exercise than is generally supposed. Horses that are greedy feeders and eat large quantities of slightly nutritious food, when worked or driven upon a full stomach, are the ones most likely to be affected; hence, the disease is more common among farmers' horses, which are fed mostly upon hay, than among those kept in livery stables and cities, where the ration of hay is limited and grain is fed regularly.

Narrow-chested horses are more subject to the heaves than deep-chested ones. Dusty and mow-burnt hay should be avoided. Water sparingly, particularly in the morning and through the day when the animal is exercised. Green food is always preferable to dry; carrots are particularly useful; they are rapidly digested and seem to have a peculiar beneficial effect upon the respiratory system. The horse affected with heaves should have moderate exercise every day. He should never be left standing in a draft of wind, and should always have a blanket thrown over him when standing in harness out of doors or under an open shed.

Treatment. Give one part each fluid extract lobelia and oil of tar; give a teaspoonful twice daily; better put on tongue just at taking out of stable for use, or may be given in feed. Give plenty salt, feed but little hay, and wet all feed. Put a tablespoonful air-slacked lime to a pail of water for wetting the food.

Another remedy: Beat three eggs in one quart of pure fruit vinegar and after it has stood about three days, or when well incorporated together, add one pound strained honey. In tablespoon doses it can be given in feed twice a day, or may be placed on the tongue.

INFLAMMATION OF THE BLADDER.

The inflammation is in the mucous membrane or inner lining of the bladder.

Symptoms. The symptoms of inflammation of the bladder are a considerable fever, great anxiety of the continence, constant straining efforts to urinate, but little water being passed, and that quite dribbly. The animal will straddle when moving as if he feared to bring his thighs together.

To distinguish inflammation of the bladder from that of the kidneys, in the latter there will be tenderness over the kidneys on pressure, which tenderness does not exist in inflammation of the bladder.

In inflammation of the bladder, if the hand is passed into the rectum, the bladder can be felt under it, and will be swollen, hard and very hot; in inflammation of the kidneys the bladder will be felt but generally not so full, and will not be hotter than other parts. This is the best method of distinguishing between the two.

Treatment. Give twenty-five drops of tincture of aconite root every four hours until six doses have been given. Give flax-seed tea to drink, but if the animal refuses to drink give as a drench. Give plenty of cold water to drink.

INDIGESTION.

Indigestion in horses is equivalent to dyspepsia in man. It is the foundation of other and more alarming diseases, among which are colic, inflammation of the stomach, liver, bowels, etc.

Symptoms. The appetite becomes irregular. An unnatural appetite will be manifested by the horse eating dirt, dry sticks, etc., and especially the dirty straw with which he is bedded, and for which, at times, he seems to have a great relish. His bowels become more or less affected. He passes much undigested grain in his manure which is often covered with slime. Worms are usually more or less connected with indigestion.

Treatment. The best possible treatment that I know of, is to turn the horse out to grass, and when you take him up again give regular feed and regular work to prevent a recurrence of the trouble. The following might be given, also: Powdered

opium, one drachm, tartar emetic one-half drachm, mixed with linseed meal and boiling water. Give every six hours.

INFLAMMATION OF THE KIDNEYS.

Symptoms. A straddling in the hind legs and a constant effort to urinate; the water being passed is in small quantities and sometimes bloody, but mostly natural in appearance; these are the common symptoms. Pressing hard over the kidneys will show that it produces pain; the pulse and breathing are increased.

Treatment. Give thirty to forty drops of muriatic acid in a bucket of cold water to drink, continuing occasionally until cured.

INFLAMMATION OF THE WOMB.

Inflammation of the uterus or womb sometimes attacks mares a few days after foaling or after an abortion; more frequently after the latter. The symptoms are the same as those attending most other internal inflammatory diseases.

Treatment. Treatment in all cases of inflammation must be prompt and vigorous, or it can be of but little value. Give twenty-five drops tincture of aconite root every four hours until six doses are given. Inject warm — not hot — water, in which add, to two quarts of water, one-half ounce pulverized slippery elm bark, and fine ground flaxseed one-half ounce, or its equivalent in flaxseed tea. After this, the following may be given in a drench or ball, — a ball is better. If given as a drench use warm water.

Tartar emetic, ...	60 grains.
Sweet spirits nitre, ...	1 oz.
Tincture of digitalis, . . .	1 oz.

Repeat the dose if necessary.

INFLAMMATION OF THE EYE.

Common inflammation of the eye is often the result of colds, and in such cases presents at first only the ordinary symptoms of that affliction; but when deeper affection than this takes place the inside of the lids will be red, and the eyes will look

blood-shot with the lids more or less swollen and partially closed with weeping, or dropping tears; the general health will be but little affected, as the horse will usually eat well and perform his usual everyday work.

Treatment. Brush the inside of the swollen lids with a camel hair pencil dipped in a lotion of "blue stone" or nitrate of silver, four grains to an ounce of rain-water.

INFLAMMATION OF THE BOWELS.

The mucous membrane or inner lining of the intestines is liable to become inflamed. This produces a dangerous disease if neglected or improperly treated.

Treatment. Few diseases require more prompt or energetic treatment than this, as it runs its course very rapidly and without proper treatment almost invariably proves fatal. My own treatment is to first give a quick acting, powerful physic, followed immediately by an injection of warm — not hot — water, to one gallon, of which has been added a pint of linseed oil, an ounce of aloes, and a handful of table salt. Such injection may be continued every half hour. Also apply blankets wrung out of boiling water to the belly, and renew them in about twenty minutes.

INFLAMMATION OF THE LUNGS.

From whatever cause, may be successfully treated, as follow:

Give fluid extract of aconite seed, spirits nitre (4 per cent.) in equal parts. Dose, 1 drachm; repeat in one hour if necessary.

INJECTIONS.

These are composed of warm water, soap, and a handful of table salt. Be careful not to have the water too hot; about blood warm. To give the injection to a horse, have a large syringe, holding at least a pint of fluid.

The diseases most requiring injections are the various varieties of colic — especially so, where Dimon's Colic Remedy is not at hand — stoppages, inflammation of the bowels, etc. Every horse owner should be the possessor of a good syringe

or be so situated that he may have ready access to the use of one at all times, as this is an investment that will surely pay in the end.

LAMPAS.

Lampas is an affection of the mouth, quite common in colts and young horses, but rarely in old ones. It consists of a swelling of the bars of the palate adjoining the gums at the back of the upper nippers.

Treatment. My method is to prick the affected bars in several places near the middle with a lance or a sharp-pointed knife, so as to draw the blood; then take about an ounce of powdered alum and a handful of fine salt and rub in thoroughly.

While working in the mouth of the horse a stick should be put across, within the mouth, to protect the operator.

LAMENESS.

It requires all the judgment an experienced person can exercise to locate some cases of lameness; for instance, — a diseased liver will often produce lameness in the right shoulder.

LUNG FEVER.

Also known as pneumonia or inflammation of the lungs. It sometimes occurs in the form of congestion of the lungs, inflammation never having taken place, and the lungs remain in a congested state, engorged with blood, until the animal dies. Inflammation of the lungs is one of the most common and most fatal diseases of the horse.

Symptoms. Chill followed by fever and increased for a short time, and is succeeded by cold legs and ears, quickened breathing, and wide-open nostrils; a peculiar quivering of the muscles of the side and breast will be observed in all cases of inflammation of the lungs, and will rarely deceive.

Treatment. Place the horse in a light and airy place and clothe him according to the weather. Bandages for the legs will, at all seasons, be necessary to keep them warm, and to that extent relieve the lungs of a portion of the blood. Aco-

nite, judiciously given, is the most beneficial remedy that I am acquainted with. Give twenty-five drops of tincture of aconite root in a cup full of cold water as a drench, or the same amount of aconite made into a ball. Repeat the dose every four hours until relief is given, till six doses have been administered. In most cases from one to three doses will suffice.

LOCKED JAW OR TETANUS.

This is a nervous affection of the muscles of the jaw and neck. The name is derived from the fact that the muscles of the jaw become powerfully affected, presenting one of the most alarming features of the disease — the inability to chew or swallow. Locked jaw frequently takes place as the last thing before death in cases of severe wounds and other accidents.

Treatment. Remove the animal into comfortable quarters by himself, where no sight or sound will be likely to disturb him, and allow no curious idler to intrude. Place a bucket of thin gruel where he can get at it without an effort to reach it. This is all the food he will need, but renew every day and keep sweet. Administer thirty drops of diluted prussic acid night and morning. Burdock leaves steeped in pure cider vinegar, applied hot, may be bound on under the jaws, as in case of distemper (which see), and the spine may be well rubbed every day with Dimon's Spavin Cure; and, in extreme cases, chloroform may be administered occasionally as a temporary relief to severe pain. (See directions for administering chloroform, Chap. XLVII, page 403.)

LICE.

These troublesome parasites should never be allowed to attack the horse, but will occasionally be found on colts, and especially weanlings and yearlings. Being of considerable size, they can readily be seen, and should be destroyed at once.

Treatment. Lice may readily be destroyed by rubbing into the roots of the hair white precipitate in powder, taking care to avoid sweating or wetting the skin for several days afterwards.

MANGE.

Mange is an infectious disease which attacks the horse's skin in the form of a pimpled eruption, the skin on the parts affected soon becoming stripped of hair and of a rough, puckered, scurvy appearance, and which has no tendency to get well of itself, but goes on from bad to worse, reducing the animal to a most loathsome object, until, finally, it dies.

Symptoms. Its first appearance is usually on the upper part of the neck, at the roots of the mane. It first shows itself in small pimples, which soon break, the parts becoming very itchy. The hair loosens and falls off, the skin become thick and covered with patches of thick scurf; in some cases a watery fluid oozes out and a scab forms, which, after a while, comes off leaving a large, rough, scaly spot. These blotches continue to spread over the body.

Treatment. Take a damp, soapy cloth and dip in fine sea sand and give the mangy parts a good scrubbing and scouring to expose the "acari," a living insect (like mites in cheese); then wash off and dry with a cloth, and apply a mixture of

Flour sulphur, ...	8 ounces.
Fish oil, ...	1 pint.
Spirits of turpentine, . . .	3 ounces.

Rub well in with the hand; apply every third day until a cure is obtained.

PROUD FLESH.

Proud flesh is the name applied to hasty granulations in a sore or wound, which presents a fungous appearance.

Treatment. To remove I usually apply finely powdered burnt alum. There may be other things as good or even better, but, having used this simple remedy in my practice for many years with very satisfactory results, I do not hesitate to recommend it.

PLEURO-PNEUMONIA.

This is an acute inflammation of the lungs and pleura. It may occur during either the progress of pleurisy or lung fever; or both structures may be attacked at the same time. This

disease generally assumes a typhoid state, and has prevailed as an epidemic in different parts of our country at different times, and in many cases has proven fatal.

Treatment. Treat the horse as for inflammation of the lungs or lung fever, by giving him pure air, cold water, and aconite. Give twenty-five drops tincture of aconite root in a cup full of cold water as a drench, or the same amount in a ball. Repeat the dose if necessary every four hours until six doses are given.

POLL EVIL.

Poll evil is an abscess making its appearance on the poll of the head. If not subdued it shows no inclination to heal, but continues to discharge a large quantity of thick, offensive matter. Among the causes of this malady may be the over-pressure of a tight headstall, the reining down the head with a martingale which stretches the muscles of the poll too tight, or a thump or blow dealt on the head.

Treatment of Thistelo or Poll Evil. Take chloride of zinc, one drachm in a pint of water, and carefully inject into every part two or three times a week, after first putting in a seton as near the bottom of the abscess as possible, and saturating the tape forming the seton with a poisonous solution.

Poll evil and fistula of the withers are really one and the same, only differently located.

QUITTOR.

Quittor is a fistulous abscess in the foot; it is of a painful and serious nature, and of the same origin as poll evil and fistula in the shoulder. It is known by a large swelling around or above the hoof and where the hair joins the hoof, which soon breaks and discharges pus.

Causes. A prick from a nail, a bruise on the sole, a bad corn, a gravel, or sometimes from the action of a sand crack.

Treatment. When determined to be caused by a bruised sole or the prick of a nail, make a free opening through the sole at the point of injury and let the matter out; after this a

flaxseed poultice may be applied and kept on for several days, changing it twice a day. It will discharge a quantity of healthy matter and incline the quittor to heal.

ROARING.

This malady is known by the peculiar roaring, whistling, or blowing sound produced in the breathing; but it is only observed when the horse is exercised. It is the result of some disarrangement in the air passages.

Treatment. In the earlier stages of the disease the following may be administered: First, frequent applications of Dimon's Spavin Cure, or a blister applied over the part of the air passage which seems to be affected, and, at the same time, use the following with a view to removing any false deposits in the air passages:

Indigo,	1 ounce.
Saltpeter,	4 ounces.
Rain water,	1 gallon.

Mix, and give one pint in feed twice a day.

But in advanced stages it is hardly worth the trouble to attempt treatment, for it will be of but doubtful utility.

In bad cases of valuable young horses an operation called tracheotomy may be performed. It consists of an opening into the windpipe and keeping a silver tube inserted therein; but as this is a surgical performance of a difficult nature it is not advisable as being at all practical except in very rare cases.

RINGBONE.

Ringbone is a deposit of bony matter taking place either on or near the pastern bone, being in reality an ossification of the ligaments and muscles about the parts and firmly attaching itself to the pastern bone, as if a part of it. This bony tumor often nearly, and sometimes quite, encircles the end of the pastern bone, forming a ring — hence the name, ringbone.

Treatment. For cases of recent origin, shave off the hair and apply the following ringbone liniment:

Spirits turpentine, ...	½ pint.
Oil spike, ...	1 gill.
British oil, ...	1 ounce.
Corrosive sublimate, . . .	2 ounces.

Shake well in the bottle and bathe the parts twice a day until quite sore; then stop bathing and grease with lard or any soft grease daily until well.

Another method, and one perhaps equally as good, is, after shaving off the hair, apply a blister composed of one part each biniodine of mercury and pulverized cantharides to six of lard, and apply with friction. Keep the head tied up for four hours so that it cannot get to the parts treated, or an ugly blemish may follow. Repeat this treatment until three applications have been given, which should consume not less than two months' time.

SCRATCHES OR GREASE HEEL.

This is a common affliction in all countries with which I am acquainted. It commences in the cavity above the heel, and between it and the fetlock. It is characterized, when fully developed, by hard scabs, sometimes in clusters and sometimes, in extreme cases, covering the leg from the heel to knee or hock, or by deep cracks in the skin. This disease may be properly divided into two stages; the first being generally known as scratches, and the second as grease or grease heel.

Treatment. There are many remedies given for the cure of this disease. I will present my readers with a few which I consider as good as the best in all cases.

Wash clean with castile soap and wipe reasonably dry. Apply ointment made of one ounce of carbolic acid to two tablespoonfuls of lard, and rub in well.

A second remedy is: One pint fish oil, one ounce verdigris, one tablespoonful salt. Heat well and stir thoroughly, then add two ounces white hellebore, powdered, and three ounces sulphur. Stir as it cools. Apply with fingers, filling all cracks. After a day or two wash thoroughly with castile soap and warm water, and rub dry; then fill the sore and the hair around it

with dry sulphur. Continue to use the salve until the scabs come off, when only the sulphur need be used. If scabs show again, use salve again. Whenever the legs are wet dry with the sulphur.

Still another preparation may be had in the following: Clean the parts affected with castile soap and warm water, then apply carbolic acid reduced with water to twenty parts to one of acid; apply with a sponge and cover the heel with a dry bandage; repeat at intervals.

SPAVINS.

Blood and bog spavin are one and the same disease, technically called bursal enlargements. Usually there is no pain or apparent inconvenience to the animal, but when its presence is accompanied by lameness it is due either to acute inflammation of the cartilage membrane covering the articular surface of the bones constituting the joints, or it may be the result of injury to the bone itself. In either case no time should be lost in prompt and judicious treatment.

Treatment. Bathe the parts affected with hot water for ten or fifteen minutes; then rub tolerably dry and apply Dimon's Spavin Cure or some other spavin cure or strong liniment twice a day. If of long standing a blister may be applied, composed of iodine and mercurial ointment in equal parts, and rub well; if the first application does not have the desired effect in twenty-four hours, repeat; then discontinue, but, if necessary, apply again in two weeks.

SAND CRACK OR SPLIT HOOF.

Sand crack is a crack in the wall of the hoof, running with the grain or up and down, occurring either at the quarters or at the toe. The former is sometime called "quarter-crack," the other "toe-crack." Quarter-crack most frequently occurs in the fore feet and at the inner quarters; toe-crack in the hind feet.

Treatment. The foot should be rested, or at least that part of it where the crack occurs, which, if in the fore foot, may be

effected by a properly arranged bar shoe, throwing the pressure on the frog, and taking care that the crust behind the crack is not in contact with the shoe. By this plan I have been able to cure sand crack during moderate work.

In obstinate cases the shoe may be so arranged on either the fore or hind foot as to not bear much weight of the wall near the crack upon the shoe, and while the foot is stripped of the shoe drive a fine nail through in the usual place, leaving it upright, and then, on placing the shoe, be sure and have one of the holes punched so as to come near the crack and on the opposite side of the nail already driven; and then, with a fine annealed wire passed over the two nails, draw the crack together as far as possible.

Keep the hoof moist with the following ointment, which I have used for many years, and which I call "Dimon's Hoof Ointment":

Fish oil, ...	1 pint.
Pine tar, ...	1 pint.
Oil of tar, ...	2 ounces.

Melt and stir together and apply, after first washing and drying the hoof.

STOCKING OR SWELLING OF THE LEGS.

The legs of the horse are quite liable to be attacked with swelling, occurring much oftener in the hind legs than in the fore ones. The extent and degree of swelling varies greatly, as also does its duration. Swelling of the legs frequently takes place as an accompaniment to other diseases, but I am now speaking of this subject as a disease of itself. It is an acute inflammation of the cellular tissue of the legs.

Symptoms. This disease is generally quite sudden in its appearance, and a horse may appear all right at night and the next morning be swollen from the hoof to the hock; but it is usually more gradual. This swelling is usually attended with a great deal of heat and swelling in the diseased part and a stiffness rather than a lamenesss. Generally the swelling goes down when the horse is exercised, and returns again from long standing.

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.

Treatment. Soak the swollen legs in hot water — as hot as can be conveniently used — then bathe freely with either Dimon's Spavin Cure or a stable liniment applied with friction, and bandage. (See instructions as to bandaging in "Management of the Trotter.") Give the following ball:

Powdered sulphate of iron,	1 drachm.
Powdered gentian root,	2 drachms.
Spanish fly,	2 grains.

Mix, and in mild cases give once a day; in severe cases give twice. Give a bran mash every night, and one teaspoonful of Fowler's Solution of arsenic to a bucket of water for a drink once a day for two days.

STUMBLING.

Veterinary writers are nearly all silent on this subject, while those who venture to mention it at all call it a "habit." In this I do not agree with them. While any and all horses are liable to stumble and sometimes fall, yet an habitual stumbler cannot be regarded as a safe animal to either ride or drive — especially to drive in single harness when attached to a two-wheeled vehicle. Neither do I believe we have a right to call a chronic stumbler a sound horse, inasmuch as there must be a source of unsoundness about him as a primary cause of his stumbling.

I regard the cause as nervous debility resulting in atrophy of the muscles of the shoulder.

Treatment. For a stumbling horse without apparent cause for stumbling, occasionally bathe the shoulders well with hot water and then apply Dimon's Spavin Cure with friction, giving at least ten minutes' good hard hand rubbing. Otherwise treat, work, or drive as usual.

SLAVERING.

From certain causes the glands of the horse's mouth become excited to secrete undue quantities of saliva, and it runs from the mouth in the form of slavers; it may be of such an extent or so long continued as to seriously reduce his flesh and strength.

The cause of slavering may be from eating some weed, such as wild lobelia; or some of the grasses, as white clover or clover rowen; or it may be caused by a sharp or ragged-edged tooth or snag of a tooth, or a rough bit with a rough driver. Anything to cause soreness or irritation of the mouth may produce slavers.

Treatment. Get rid of the cause as soon as possible. If a broken tooth, take it out; if a sharp edge of a tooth, rasp it smooth; if a rough bit, change it; if a rough driver, change him at once.

SHOE BOIL.

A shoe boil is a swelling at the elbow, near the place of buckling the girth, and has been called a callous of the elbow. It is usually caused by a bruise of the hoof or shoe in lying down in the stable. It frequently assumes the size of a hen's egg, and is sometimes much larger. It often becomes painful, and many times interferes with the work of the horse; after it becomes thus troublesome the horse will often avoid lying down at all, or will change his position when doing so.

Treatment. Bathe the parts two or three times per day with hot water, to which may be added a solution of carbolic acid, one part to twenty of water. Saturate a pledget of tow or oakum with turpentine and put into the opening, which will keep it discharging for several days, which is very necessary. When the tumor has subsided and the discharge stopped it will heal very readily. If it does not break of itself, I would recommend a seton, put in as low down as possible.

STRAIN OF THE STIFLE JOINT.

The stifle joint is composed of the union of the lower end of the upper thigh bone with the head of the lower and larger thigh bone and the patella forming the front part of the joint. This joint is a very strong and complicated one, and corresponds to the knee joint of man, including the knee-pan. This joint becomes sometimes dislocated or put out of place, and occasionally strained; the injury is usually called stifle, or the horse is said to be stifled.

Treatment. Give absolute rest in all cases. If the lameness proceeds from a strain only, then bathe with warm water and apply with friction Dimon's Spavin Cure, as recommended for all strains; but if the lameness is caused by a dislocation of the stifle or patella, then, if in winter, give a roomy box stall kept clean, and have a stifle shoe made and tacked on to prevent the bone from sliding out of place and knuckling at every step. If in mild weather turn out in a level lot or paddock with shoe, as above.

STRINGHALT.

This is a peculiar twitching up of one or both of the hind feet when the horse is in motion. It is caused by a derangement of the nerves supplying the muscles which produce it.

Youatt does not regard stringhalt as unsoundness, but I do; still, this ailment does not materially injure the usefulness of the animal affected.

Treatment. All that can be done for this malady is to restore in a measure the lost influence of the nerves of the muscles of the thigh. This may be best accomplished by rest, good feeding, and care; also give one grain of strychnia nux vomica in the food daily for six weeks. In addition to this give thirty drops of Fowler's Solution of arsenic in a bucket of drinking water every other day for some length of time.

In 1872 I cured a valuable mare of a severe case of this eyesore (of a recent occurrence, however) with much the same treatment as above.

SWEENEY.

Sweeney is an infection of the muscles of the outside of the shoulder. It is a very common disease in the Western States. It is characterized by the shrinking of the shoulders, accompanied by lameness. It is atrophy, or the wasting away of the muscles.

Treatment. Fill a small sack with cayenne pepper and salt. Dip the sack in water and rub the affected parts quickly and vigorously, up and down the shoulder; then apply Dimon's

Spavin Cure, or good liniment, with friction, also; use every other morning until a cure is effected.

SETONS AND ROWELS.

Setons may be composed of pieces of tape or common lamp-wicking, or of hair from the tail of the horse, or from common cotton cloth, or string like a large fishline. I prefer the tape string of proper size to the hair; pass it through and beneath the skin, leaving the two ends hanging out, either tied together or with a knot at each end. I think the latter plan the safer, as a loop is liable to get caught into sometimes and may get torn out.

Among veterinary instruments we find a needle made on purpose for putting in setons, and called a seton needle. This is very handy for all horsemen to have; they come in various sizes, calculated for use in various places. By the aid of this needle and tape, or other material, smeared with blister compound, a large tract of the cellular membrane — by pinching up the skin into a fold — can be pierced close to the body; the needle is then carried straight through. In three or four days a profuse discharge will commence, and must be kept up, if necessary, by repeated applications of this blister. The ends of the seton should be sponged occasionally to remove the accumulated matter.

STRAINS AND SPRAINS.

A strain is a severe wrenching of the muscles, tendons, or ligaments of some part of the structure, in which some of the fibers may be lacerated or torn. Strains constitute an important class of the accidents of the horse. Strains of many parts require special attention at once — such as strains of the coffin joint, of the back sinews, of the stifle, of the shoulder, of the back, of the hip joint, and of the knee, etc.

Treatment. Absolute and entire rest is the principal point to be attended to in the care of sprains of whatever nature and wherever located, as a sprain cannot be cured without rest, no

matter what the remedies that may be applied. If there be much fever and excitement about the horse, give a few drops of tincture of aconite root; then thoroughly soak the part in warm water and apply, according to directions, Dimon's Spavin Cure, well rubbed in. Continue this at least twice every day until the patient is well.

SURFEIT.

This is a disease of the skin which makes its appearance in small lumps or pimples on the neck of the horse, and sometimes spreads over his back, loins, sides, and quarters. It is usually due to some fault in the diet, the surroundings of the animal, or to lack of proper grooming. It occurs most commonly during spring and fall.

Treatment. The bowels must be opened by an active purgative, to be followed by a course of tonics. Give from six to eight drachms each of the best aloes and ginger (either in a ball or a drink), according to the size and condition of the animal. If the bowels are not freely moved by this dose, repeat it in three days. Mares well advanced in pregnancy should not receive the full dose until after foaling. Yearlings may receive one-fourth, and two-year-olds one-half of the above dose. Colts can better be given castor oil in doses of from three to six ounces, according to age. After the bowels have been moved give two tablespoonsful of the following mixture on the feed twice daily: Powdered nux vomica, one-fourth pound; nitrate of potash, one-fourth pound; sulphate of soda, one pound. Mix.

SPLINT.

This is a callous or bony tumor growing on or over the splint-bones. To clearly understand the nature of this difficulty we should consider that the leg is composed of three bones, *viz.*, the cannon and two splint bones. The cannon-bone, extending from the knee to the fetlock joint, is a long round bone, and at the upper end, where it unites with the bone of the knee, is marked by a high ridge running from the back to the head of the bone, and another ridge at each side,

thus presenting a double putty-like surface admitting of a back and forward motion but no lateral or side motion. At the back of the cannon-bone, and to the outer and inner edges of it, are situated the two splint bones. These gradually taper off to a point, being very thin and flat; they are somewhat thick at the top, but get thinner towards the point. When the splint is forming on these bones there is generally some lameness, but as it progresses the inflammation and tenderness subside and the lameness usually disappears.

Treatment. The best remedy that I have ever tried for the removal of splints is Dimon's Spavin Cure, used according to directions. This, in my practice, has never failed to remove the splint without leaving any scar or trace. Splints may also be removed by the agency of a mild blister.

STRAIN OF THE COFFIN JOINT.

The coffin joint is composed of the union of the coffin-bone, the navicular bone, and the lower pastern bone. This joint is a little below the ring.

Treatment. Give absolute and entire rest. Thoroughly soak the part affected with warm water; then apply, with friction, Dimon's Spavin Cure, according to directions given with each bottle, at least twice every day, and bandage the joint until a cure is effected.

THRUSH.

This disease results from inflammation of the lower surface of the sensitive frog, its usual secretion of horn having been changed, or partially changed, into pus or matter. Contraction is apt to result from thrush.

Treatment. Carefully remove all diseased parts and thoroughly cleanse the feet with hot water, to which may be added a solution of carbolic acid, one part to twenty of water. After doing this, saturate a piece of oakum or tow with a solution made double the strength of the former, and apply it. Continue this treatment until all soreness and odor has ceased, and then you will have set up a healthy condition. It would

be well before applying the above treatment to pack the cavity of the foot with meadow moss every night until you have cooled them off and softened them a little.

Another remedy is to take finely powdered white vitriol, one part with four parts pine tar; before applying, inspect the frog and remove all decayed parts. Saturate tow or oakum with this mixture and press to the bottom of the cleft of the frog; repeat about twice a week.

I will also give two other feasible remedies, *viz.:*

Lard, 5 ounces, rosin, 1 ounce, melted together over a slow fire. After taking off and while cooling, stir in 2 ounces fine calamine powder and 1½ ounce turpentine.

The second remedy is:

Red precipitate, . . .	1 ounce.
Blue vitriol, ...	1 ounce.
Burnt alum, ...	½ ounce.
Powdered white sugar, . .	1 ounce.

Mix, and apply daily to the affected frog.

TUMORS.

Horse flesh is heir to several kinds of tumors, or lumps under the skin, most of which are slightly movable. Some kinds grow to an enormous size; and some are hard or gristly all through, — others only part of the way, and the center filled with a thick fluid; while others have only a thin wall on the inside filled with fluid.

Treatment. Either insert a seton on the lower part, or cut open and inject for a few times a teaspoonful of the tincture of iodine, to kill the walls of the cyst.

TAIL RUBBING, OR RAT TAIL.

An intense itching at the root of the tail on the upper side sometimes occurs, causing the horse to rub the part against anything he may find to answer the purpose until the hair is worn off. This itching, when caused by the eruption of the skin at that place, may receive the following:

Treatment. Wash the parts daily with castile soap and warm water and dress with

Spirits of turpentine,
Carbolic acid,
Linseed oil,
} equal parts.

THICK WATER.

There is really but one form of disease causing the urine to become of a thick, albuminous character. It is of rare occurrence in the horse although quite common in man. It is called Bright's disease or albuminous urine. But there are many other things that cause the horse's urine to become of a thick and changed character. For instance, a little over-feeding; the use of improper food; bad digestion; slight cold, and many other trifling things not reckoned as diseases may cause this state.

Treatment. For these various causes of a change in the appearance of the water, I would not recommend strong or severe treatment at first, but would endeavor to rectify by giving a little powdered resin in the feed, and by an ounce of saltpeter dissolved in the drinking water. A very little of Fowler's solution of arsenic in the drinking water, occasionally, is also beneficial.

THOROUGHPIN.

An enlargement of a soft and puffy character appearing in the space between the hamstring and the lower end of the thigh bone, above the hock. It is an enlargement of one of the little sacks placed in the proximity of all joints and ligaments, and is of the same character of wind galls.

The enlargement may appear in but one of the spaces in front of the hamstring, but it generally appears in both sides. It is like wind galls, mainly an eye-sore, as it seldom produces lameness, therefore it cannot be regarded as legal unsoundness, although a mark of evidence of the horse having had rough usage.

Treatment. My method is to soak the parts with water

as hot as can be comfortably borne; then rub tolerably dry and apply Dimon's Spavin Cure, according to directions, rubbed thoroughly into the skin. In case of inability to procure this remedy the parts may be blistered.

THUMPS.

A violent beating or throbbing of the flanks is called thumps. It is really a palpitation of the heart, generally produced by over-work, particularly so in hot weather. A horse subject to the thumps is very unreliable for service in any form.

Treatment. In a slight attack, occurring from over-exertion, give a bucket of cold water with a full handful of salt dissolved in it. The horse should have rest and be allowed to stand in a cool or warm place as the case may be. If the attack continues give the following in drench or ball.

Tincture of digitalis, 1 ounce; sweet spirits nitre, 1 ounce; sulphuric ether, 1 ounce; water, 1 pint; if for a drench: otherwise meal to make a ball. Repeat every three hours until relieved.

WIND GALLS.

These are tumors of a puffy character of variable size and are also located on the legs, from the fetlock to the hock or knee.

Treatment. A daily application of tincture of iodine will sometimes remove them, but the most certain cure is to apply a small seton at the bottom, or puncture with a lance or sharp knife, and with a small syringe inject into it a teaspoonful of tincture of iodine.

WORMS.

There are several different kinds of worms found in the intestines of the horse; the principal ones being the long round worms found in the small intestine, and the needle worm found in the large intestine.

Pin worms are those troublesome little white ones usually

found in and around the large intestine near the fundament, and are often of a very annoying nature.

The long, round worm is from six to eight inches in length, resembling the common angle worm or the same worm found in man.

The needle worm occupies the large bowels, sometimes in incredible quantities; they are from three-fourths of an inch to two inches in length. They are slim and sharp pointed; great numbers of them often descend into the rectum, and become very troublesome.

Symptoms. When worms are troubling a horse much his coat becomes unthrifty in appearance, the hide tight and belly tucked up; the appetite is greedy. Cough may sometimes be caused by worms, but the most reliable symptoms are a rough scaly appearance about the fundament, and the discharge of a whitish yellow mucus, which dries up and leaves sticky yellowish scales about the anus. This generally indicates the presence of needle worms. A horse troubled with needle worms or pin worms will generally show signs of uneasiness, frequently rubbing his tail or tucking it under and switching. There are a great many remedies given for the destruction of these annoying pests; I will mention a few of them that I consider most reliable.

WORM BALL.

Asafœtida, ...	2 drachms.
Calomel, ...	½ drachm.
Savin, powdered, . . .	½ drachm.
Oil of male fern, . . .	30 drops.
Treacle enough to make a ball.	

This should be given at night and followed next morning by the following purge:

Linseed oil, ...	1 pint.
Spirits of Turpentine, . .	2 drachms

WORMS IN COLTS.

Give santorimine three times a day in a little bran or oats;

for young colts or yearlings give twenty grains at a time; for older ones, thirty grains may be given as a dose. This medicine has but very little taste, and will readily be taken by the colts in the manner prescribed. Give three or four bran mashes a week; give medicine on an empty stomach as much as possible.

Another worm remedy is found in the following formula:

White hellebore, powdered, . .	1 drachm.
Sulphate of iron, powdered, .	1 drachm.
Linseed meal, ...	1 ounce.

To be given in hot bran mash at night. Repeat in forty-eight hours if necessary. Still another recipe, to be relied on, is the following:

Put a handful of sifted wood ashes into a quart bottle and fill with cider vinegar; give as a drench. It will foam as a glass of soda, and should be given the moment it foams. Two bottles is said to cure the worst cases of worms.

The best character of treatment for pin worms is an injection of the following:

Raw linseed oil, . . .	2 quarts.
Turpentine, ...	6 ounces.

Inject a little into the rectum every night for one week. Afterwards repeat if necessary. This is a very effectual remedy.

WOUNDS.

Wounds are divided into simple, incised, contused, lacerated, punctured, and poisoned. Those followed by bleeding are termed bleeding wounds, and many times are quite dangerous, requiring the most prompt attention.

The principle on which general wounds are to be treated is usually quite simple. If the wound is of recent occurrence and free from much bruising of the edges, after first cleansing it from dirt, hair, etc., the better way is to bring the edges together by stitches performed by the use of needles made for the purpose, and threaded with saddler's silk. After sewing

up the wound keep it well bathed with liniment, wormwood, arnica, etc. Both of these — wormwood and arnica — are very good to take out the soreness of a fresh wound.

There can be no rule laid down for the treatment of all wounds, but in all cases some judgment and much good common sense will be required to successfully cope with them.

THE OLD COUNTRY CIRCUS.

How dear to my heart is the show of my childhood,
The old country circus my boyhood days knew ;
In these days of three rings, of hippodromes, railroads,
How fond recollections present thee to view.
For weeks, while the posters on fences and church sheds
Portrayed to my young eyes the scenes that should be,
No soft thrill of love, no throb of ambition,
Has since equaled the bliss I gained dreaming of thee !
The old country circus, the shabby old circus,
The wand'ring old circus my boyhood days knew.

How faithful I worked in the ways that presented,
To gain the few pennies my ticket should buy !
No toil was so sweetened — no reward so stupendous —
No miser e'er cherished his hoard as did I.
How fair shone the sun on the glad day appointed !
How rife with strange bustle the sleepy old town !
And when o'er the hill came the rumble of wagons,
The bound of my heart said : " The circus has come."
The old country circus, the old faded circus,
The one-horse old circus my boyhood days knew.

What pageant of now can that " grand entry " compass,
What wit of to-day like those jokes of the ring ?
And those divans of pine boards — such ease Oriental !
No reserved, cushioned chairs of the present can bring.
One elephant only, satisfying, majestic,
Not Jumbo, nor sacred, neither painted nor white —
Take them all, the whole dizzy, triple-bill programme,
For a single return of that old-time delight,
The old country circus, the tawdry old circus,
The perfect old circus my boyhood days knew.

— *Scrap Book.*

CHAPTER XLVII.

MISCELLANEOUS.

Gentlemen horsemen — To become famous — Castration — Conditioning — To administer chloroform — Significance of the bay color — Docking — Warranty — Runaway, to stop — Trotting standard — Pacing standard — Rules for laying out tracks — Rules of admission to registry.

MEN cannot become famous unless they do something that is worthy of fame; and they cannot do things worthy of fame unless they have worthy hearts. That is her temple at last — and it is not glass, nay, not even diamond. Fame is the product of man's nature as much as the life he lives, the acts he does, the children he begets. It matters not whether he moulds and makes the greatest horse, or chisels out the greatest picture, or writes the greatest books, or lives the most heroic life — none of these are the children of chance, the handmaids of hazard. They come from within, from deeper depths and grander sweeps.

So firmly do I believe these things, that I do not hesitate to say that no narrow, small, and contracted soul will ever breed and perfect a world-renowned horse. Such a man might accidentally mate the sire and dam, but he could no more bring the offspring down the road of flinty doubt and uncertainty, the dusty road of toil and work and perseverance, the quiet, shady one of honorable dealings and unswerving integrity, the slippery one of jobs and tricks and littleness, through all of these — for through all of these, horses, like great men, have to pass unscathed — to the gilded avenues of fame, than he could turn a paste-diamond gambler into the unpolished genuineness of an Abraham Lincoln.

And how well do great men and great horses fit! Imagine Bucephalus belonging to anyone but the conqueror of worlds.

Picture Alix the property of Kneebs and just in from a summer outing through Europe.

There has always been a mutualness, second nature, so to speak, between Morris Jones and his peerless mare.

It may be my fancy, my romance; but I don't believe horsemen who know them both will say so when I pronounce the attributes of their similarity. At least, I cannot separate them. Gentleness, kindness, genuineness, honesty, simplicity, nerve; a humanity that would make a human of a friendless dog; a courage that "I fight for right through the heats of three days and the deaths of nine battles, though the devil and his angels may be on the other side."

MAY STILL BE GENTLEMEN.

There are a great many people who think that a horseman, and especially a driver, is not fit to go into good society. Now, I am of the opinion that a man can be a horse owner or a driver and be just as much of a gentleman as he could if his vocation were that of a bank cashier or manager of a business house. I have in mind a young man I saw last summer at the races with a small string of horses. When I came to his stable everything was quiet, and I heard several times that a lady need not be afraid to go and look at his horses. There was no swearing, no coarse, vulgar language of any kind. There is nothing in the horse business that need, of necessity, degrade men. Those that will be blackguards would be such under any circumstances and in any calling in life.

CASTRATION.

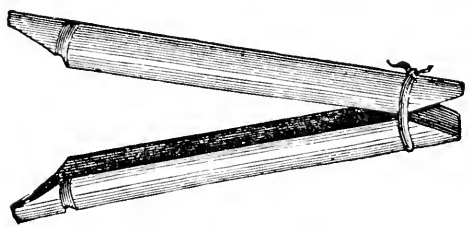
This operation has been performed on the horse from his earliest domestication; it is done for the purpose of enhancing the usefulness of the male by subduing his spirit and rendering him as mild and docile as is the female. Immemorial custom has sanctioned this operation.

As to the best age of the colt to be castrated, many opinions are formed. My own idea is, as a rule, from about one and a half to two years is the best age. There are several different

modes of performing the operation of castration; and I think in my long practice I have tried them all — from the old-fashioned way of clamping, burning, and searing with hot irons made for the purpose, to the French method of twisting off the testicle cords with an instrument manufactured especially for that purpose and called the ecrascur.

Of all the operations in vogue I prefer the following, what used to be known in New England as the Stanton method. This operation is as follows:

First make a pair of clamps five or six inches in length from a piece of elder-wood of suitable size, by splitting open and removing the pith; then bevel off the ends for about half an inch; cut a notch or groove around them. Now fill the space formerly occupied by the pith with tallow mixed with red precipitate and corrosive sublimate in equal parts — the last two ingredients in equal parts; the tallow being the main ingredient.



ORDINARY CLAMP.

The two pieces of wood are then placed together just as they formerly belonged, and a waxed cord tied around one end in the groove, so as to form a sort of hinge. The clamp thus prepared is ready for use.

INTERNAL FACE OF CLAMPS.

In case elder is not at hand or easy to obtain, other soft wood may be used, if of suitable size, and the center grooved out.

When all is ready, cast the colt or horse and draw his hind legs well forward, and firmly secure all the legs and turn the animal on his back, and proceed to cut through the scrotum with a very keen blade, and after the testicle is laid bare then

pull it out far enough to place the clamp well up on the testicle cord; then firmly secure with waxed string; then cut the testicle loose from the cord.

After the clamps have remained on from twenty-four to thirty-six hours they may be removed by cutting through the waxed cords at the ends, when they will readily drop off of themselves.

CONDITIONING A HORSE.

We many times find horses ailing from no particular disease, but are generally out of condition and need toning up. In such cases I have found satisfactory beneficial results from the following treatment, called Dimon's Condition Powders, and which anyone can make:

Elecampane root, powdered,	6 oz.
Fenugreek,	4 "
Gentian root, powdered,	4 "
Rosin, powdered,	8 "
Jamaica ginger,	8 "
Sulphur,	8 "
Cayenne pepper,	2 "
Black antimony,	4 "
Anise seed,	4 "
Saltpetre, pulverized,	6 "
Fine salt,	1 pound.
Hard wood ashes, sifted,	2 quarts.

Mix thoroughly and give tablespoonful once a day in feed — cut feed best. Any quantity can be made in same proportions.

Fowler's Solution of Arsenic, one teaspoonful occasionally in a bucket of drinking water, is good as a blood purifier, and to give the horse a bright and sprightly appearance.

THE ADMINISTRATION OF CHLOROFORM.

The use of chloroform to produce insensibility to pain is often a great aid to the operator on the horse, who, without it, works under great difficulties owing to the nervous twitch the poor animal gives at each touch of the knife or needle. Under chloroform, however, he lies as if dead; and so long as its

effects continue the most elaborate dissection may be conducted with comparative ease and safety.

There is some danger, however, of overdoing this powerful agent, but the risk is not so great as is generally supposed; with ordinary care injurious effects are seldom produced.

The best and most sensible apparatus for the purpose of administering chloroform is a common wire muzzle, to the upper edge of which a strip of leather six inches wide is stitched, and so arranged as to be buckled around the upper part of the jaws. This insures that all the air inspired shall pass through the wires, and by covering them with a cap of very loose flannel, in which a few holes are cut to facilitate respiration, the muzzle may be made ready for use.

The horse is first cast, after which the above apparatus is put on and buckled around the jaw, when, on sprinkling the chloroform over the cap of the flannel, it may be applied or removed in an instant, and the amount of anæsthesia administered regulated accordingly. Without some guard such as the wire affords, the chloroform runs over the nostrils and lips and blisters them; but when used as above such an accident can only occur from over-saturating the flannel. The necessary amount of chloroform must be used, but when it is once found that the prick of a pin is borne without flinching, the flannel may be removed and the operation commenced at once, taking care to have an assistant ready to put it on again immediately the patient shows signs of returning to consciousness or sensibility to pain. Six or eight ounces of chloroform must be provided, as the quantity required is somewhat uncertain; the average dose is about three or four ounces.

THE SIGNIFICANCE OF THE BAY COLOR.

Phoinic was an Egyptian title of honor, from which the Greek and Latin forms of Phœnix and Punicus were derived. It was first given to persons of great stature (Anak with an Egyptian prefix). Thence it was applied to people of power

and eminence. The Cuthites or Royal Shepherds in Egypt were so called. The title Phœnices was given to the Egyptian colonists of Tyre. They did not call their colony so themselves but it was called so by outsiders, — the Greeks; hence it was known as Phœnicia, so long regarded as having played such an influential part in early civilization.

The appellation may be traced from Babylon to Arabia and Egypt thence through the Egyptian colonies to the west. As we are thus informed, it was an individual title for a lord or prince, and was conferred on many things primal or noble. Hence the red or scarlet color appropriated by great and honorable persons was termed phœnic.

Phœnix was a color among horses; they were styled phœnices and phœniciati. This was derived from the color of the palm tree. (Pliny informs us that the noblest palm among Babylonians were called royal palms, and were emblems of royalty.)

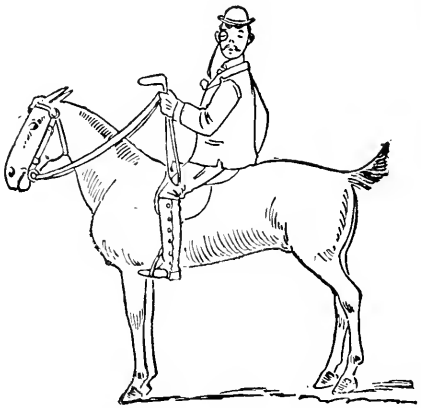
Upon this account they also had the name of spadices, — synonymous with the other, and Homer, describing the horses of Diomedes, tells us that one was phœnix, or of a bright palm color, with a white spot on his forehead like a moon. This horse was of a bright palm color, which is a bright red. Such horses are now called bays. This word is of similar origin. The branch of a palm tree was called "bai" in Egypt. Baia is used by St. John for palm bearers, the palm being used on the most solemn occasions by the Jews. The Greeks borrowed the word from Egyptians, and the Latins have the same word in the form Badius, used by Varro in regard to horses.

The palm tree was regarded as immortal, or, if it did die as reviving again. The Egyptians gave the name of bai to the soul. The legend of the phœnix bird as an emblem of immortality is evidently derived from this regard for the palm maintained by both sacred and profane people. To-day the belief may be perpetuated in Palm Sunday and Ash Wednesday.

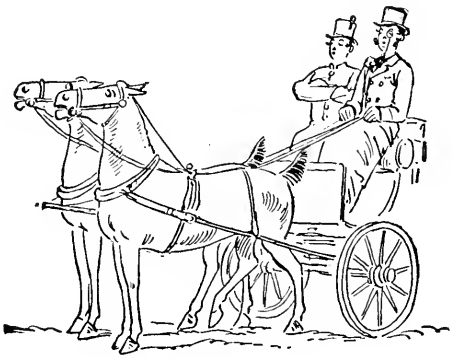
DOCKING.

As to docking or robbing the horse of the beautiful and useful appendage (or any part thereof), the tail, I consider a most inhuman and brutal practice. And not only is it inhu-

MANNER OF DOCKING.



CHAPPIE OUT FOR A RIDE.



SNOB CREATING A SENSATION.

man, but such treatment disfigures and injures the appearance and beauty of the animal in the eyes of every true horseman.

It was a fad of "ye olden tyme," I know; but I did think that the American people of this day of progress, enlightenment, and, I had hoped, refinement, had forever done away with such inhuman and absurd practices. Yet the foolish fancy seems to be revived, and because Snob and Chappie have their horses

mutilated others think that to be in the swim they must follow suit. Indeed, we learn that all the horses in the Presidential stables at Washington have their tails docked or banged. Since the days of Thomas Jefferson the White House horses have carried their beautiful flowing manes and tails undisturbed. It is a regrettable fact that modern society requires this barbarous usage, and it is more to be regretted that carriages of state are now incomplete without the disfigurement of one of nature's most beautiful gifts to horses.

That this practice will not be of long continuation is evinced by the fact that the Humane Society for the Prevention of Cruelty to Animals have taken the matter into their hands. Two interesting cases were recently tried in the District Court of El Paso County, Colorado. The Humane Society appeared as plaintiff and forced both the owners of the horses and the veterinary surgeons who performed the operations to appear as defendants. In both suits the plaintiff came off victorious.

WARRANTY.

The written warranty of a horse is a form of certificate given on the purchase or payment, setting forth the soundness or kindness — or both — of the animal under consideration.

There are so many hidden things about the structure of the horse that it must be a hazardous undertaking to warrant any horse perfectly sound in all respects; for while he may appear to be so, as far as any one can see — from external appearances — he may be possessed of some internal derangement of which he may die in less than a week. Few persons will bring an action against the seller for unsoundness, as it is difficult to maintain such an action and get a verdict upon it; consequently, the best forms of warranty amount to but little in the eyes of the law.

TO STOP A RUNAWAY HORSE.

A thin cord with a running noose around the horse's neck is much used in Russia.

"At Rome," says a writer in the *American Cultivator*, "I saw in the Corso a phaeton with two spirited horses bolt. They were driven by a lady and I expected to see instant destruction, but the lady coolly grasped a thin cord, and within thirty yards the horses came to a full stop."

When a horse bolts he always takes the bit in his teeth and the skill of the driver is useless. The moment the pressure comes on his windpipe the horse knows he has met his master.

TROTTING STANDARD.

First. Any trotting stallion that has a record of two minutes and thirty seconds (2.30) or better, provided any of his get has a record of 2.35, trotting, or better, or provided his sire or dam is already a standard trotting animal.

Second. Any mare or gelding that has a trotting record of 2.30, or better, whose sire or dam is standard.

Third. Any horse that is the sire of two trotters with records of 2.30, or better.

Fourth. Any horse that is the sire of one trotter with a record of 2.30, or better, provided he has either of the following additional qualifications: 1. A trotting record of 2.35, or better. 2. Is the sire of two other animals with trotting records of 2.35, or better. 3. Has a sire or dam that is already a standard trotting animal.

Fifth. Any mare that has produced a trotter with a record of 2.30.

Sixth. The progeny of a standard trotting horse when out of a standard trotting mare.

Seventh. Any mare whose sire is a standard trotting horse, and whose dam and second dam are by a standard trotting horse.

PACING STANDARD.

First. Any pacing stallion that has a record of two minutes and twenty-five seconds (2.25), or better, provided any of his get has a record of 2.30, pacing, or better; or, provided his sire or dam is already a standard pacing animal.

Second. Any mare or gelding that has a pacing record of 2.25, or better, whose sire or dam is standard.

Third. Any horse that is the sire of two pacers with records of 2.25, or better.

Fourth. Any horse that is the sire of one pacer with a record of 2.25, or better; provided he has either of the following additional qualifications: 1. A pacing record of 2.30, or better. 2. Is the sire of two other animals with pacing records of 2.30. 3. Has a sire or dam that is already a standard pacing animal.

Fifth. Any mare that has produced a pacer with a record of 2.25, or better.

Sixth. Any mare whose sire is a standard pacing horse, and whose dam and second dam are by a standard pacing horse.

Seventh. The progeny of a standard pacing horse when out of a standard pacing mare.

Eighth. The progeny of a standard trotting horse out of a standard pacing mare, or of a standard pacing horse out of a standard trotting mare.

RULES FOR LAYING OUT TRACKS.

Half-Mile Track. The question often arises with owners of stock farms as to the correct method of laying out a track for the training and development of their stock. To such the following directions will fill the bill.

For a half-mile track lay off or draw two parallel lines, 600 feet long and 452 feet and 5 inches apart. Then, half way between the two extreme ends of the parallel line, drive a stake; then loop a wire around the stake just long enough to reach to either side; then make a true curve with the wire from the stake, thus describing your half circle for the turns, and throw them up one inch to the foot. Three feet from the line will measure a full half mile.

To Lay Out a Full Mile Track, select a level field of forty-two acres, draw through the center a straight line of 440 yards

(a quarter of a mile). On each side of this line, and an exact distance of 140 yards and 2 inches from it, draw parallel lines of equal length, so that the space between the two outer lines will be 280 yards and 4 inches. This being done a stake should be driven at each end of the center line; a cord should be fastened thereto.

Extend the cord at right angles for 140 yards 2 inches, until it touches the end of the outer line, and then describe with the extreme end of the cord an outer curve or semicircle between the ends of the two outer lines.

There will be a continuous outer line, being exactly a mile (1,760 yards) in length, and requiring an enclosure of forty-six acres of ground. From this outer line or track set the fence of the course three feet in on the straight sides and curves. In this way an exact mile, as near as may be, is preserved for the actual foot track of all the horses.

The first distance post is sixty yards from the judges' stand, the second at 240 yards, and the stand is sixty yards before entering the turn.

The track should be graded around the turn like the track of a railroad or circus, the outer portion the highest, so that a horse can extend himself at full speed.

CHAPTER XLVIII.

The world's fastest records to the close of 1894 — Fastest records all ways going — Breeding of fastest horses — Tables of fastest records.

TROTTING, fastest yearling (2.23): Abdell, br. c., by Advertiser; dam, Beautiful Bells, by the Moor.

Fastest two-year-old (2.10¾): Arion, b. c., by Electioneer; dam, Manette, by Nutwood.

Fastest three-year-old (2.08¾): Fantasy, b. f., by Chimes; dam, Honora, by Almonarch.

Fastest four-year-old (2.05¼): Directum, b. s., by Director; dam, Stemwinder, by Venture.

Fastest five-year-old (2.06¾): Ralph Wilkes, ch. s., by Red Wilkes; dam, Mary Mays, by Mambrino Patchen.

World's fastest record (2.03¾): Alix, b. m., by Patronage; dam, Atlanta, by Attorney.

World's stallion record (2.05¼): Directum, blk. s., by Director; dam Stemwinder, by Venture.

Fastest race in straight heats, 2.06, 2.06¼, 2.05: Alix, b. m., by Patronage; dam, Atlanta, by Attorney.

Fastest team record (2.12¼): Honest George, b. g., by Albert; dam, Fanny Crowder, and Belle Hamlin, b. m., by Almont, Jr.; dam, Toy, by Hamlin's Patchen.

Fastest trotter with running mate, race record, 2.08½: Frank, b. g., by Abraham; dam, Root, by Green Mountain Boy.

Fastest two miles in harness, 4.32: Greenlander, blk. s., by Princeps; dam, Juno, by Rysdyk's Hambletonian.

Fastest three miles in harness, 6.55½: Nightingale, ch. m., by Mambrino King; dam, Minegna Maid, by Wood's Hambletonian.

Fastest four miles in harness, 10.12: Senator L., b. s., by

Dexter Prince; dam, Fanny Bayswater (thoroughbred), by Bayswater.

Fastest five miles in harness, 12.30¾: Bishop Hero, g., by Bishop; dam, Lida Kendall, by Hero of Thorndale.

As an object lesson to the breeders of American Trotters, the following facts may be gathered from the above records:

Alix, 2.03¾, the world's fastest trotting record.

Abdell, 2.23, the fastest yearling record.

Arion, who holds the world's two-year-old record of 2.10¾

Fantasy, 2.08¾, the world's record for three-year-old.

Directum, 2.05¼, the world's record for four-year-old.

Ralph Wilkes, 2.06¾, the world's record for five-year-old.

Directum, the world's stallion record, all trace in a direct line, and some quite close up, to that great progenitor of speed, Rysdyk's Hambletonian; and the list might be extended.

Kitty Bayard holds the fastest race record on half-mile track, 2.12¼.

THE WORLD'S RECORDS FOR PACERS.

Fastest yearling (2.20¾): Belle Acton, by Shadeland Onward.

Fastest two-year-old (2.07¾): Directly, blk. c., by Direct; dam, Mabel of Naubic.

Fastest three-year-old (2.10): Whirligig, bro. f., by Wilks; dam, Minnie Barrington, by Naban.

Fastest four-year-old (2.04): Online, b. c., by Shadeland Onward; dam, Angeline, by Chester Chief.

World's Record, 2.01½: Robert J., b. g., by Hartford; dam, Geraldine, by Jay Gould.

World's stallion record (pacing), 2.03¾: John R. Gentry, b. s., by Ashland Wilkes; dam, Dame Wood, by Wedgewood.

Fastest race in straight heats (pacing), 2.03¾, 2.02½, and 2.04¾: Robert J., b. g., by Hartford; dam, Geraldine, by Jay Gould.

Fastest two miles in harness, pacing, 4.47¾: Defiance, b. g., by Chieftain, and Longfellow, ch. g., by Red Bill, dead heat.

Fastest three miles in harness, 7.33¼: Joe Jefferson, b. s., by Thomas Jefferson.

Best four miles in harness, 10.10: Joe Jefferson, b. s., by Thomas Jefferson.

Best five miles in harness: Lady St. Clair, by St. Clair.

Fastest pacer with running mate, 1.58¼: Flying Jib, b. g., by Algona; dam, Middletown Mare, by Middletown.

Team record, pacing, 2.18½: Daisy D., b. m., by Black Star, and Silvertail, g. g., by Tempest, Jr.

FASTEST RECORDS FOR RUNNERS TO JANUARY 1, 1895.

¼ mile, Bob Wade,	0.21¼
⅜ mile, Fashion,	0.34
½ mile, 122 lbs., Geraldine (straight course),	0.46
½ mile, 122 lbs., April Fool (straight course),	0.47
4½ furlongs, 115 lbs., Geraldine,	0.54
⅝ mile, 111 lbs., Maid Marian,	0.56¾
5½ furlongs, Tormentor,	1.03
¾ mile (straight), D.,	1.09
6½ furlongs, Geraldine,	1.19¾
⅞ mile, Bella B. (straight),	1.35½
1 mile, Salvator (straight),	1.35½
1⅛ mile, Tristam,	1.51½
1¼ mile, Banquet (straight),	2.03¾
1⅜ mile, Sabine,	2.18¾
1½ mile, Lamplighter,	2.32¾
1¾ mile, Hotspur,	3.00¾
1⅞ mile, 90 lbs., Enigma,	2.20
2 miles, 110 lbs., Ten Broeck,	3.37½
2⅛ miles, 99 lbs., Joe Murphy,	3.42
2¼ miles, 114 lbs., Springback,	3.56¼
2¼ miles, 114 lbs., Preakness,	3.56¼
2½ miles, 104 lbs., Aristides,	4 27½
3 miles, Drake Carter,	5.24
4 miles, 104 lbs., Ten Broeck,	7.15¾

A LIST OF 2.10 TROTTERS, PRESENT AND PAST RECORDS.

The following table shows the past and present records of the 2.10 trotters:

TABLE I.

Showing all horses that have trotted in 2.10 or better; arranged according to records to date.

Alix, b. m. (6), by Patronage, 4,143,	2.03¾
Nancy Hanks, br. m. (6), by Happy Medium, 400,	2.04
Directum, blk. h. (4), by Director, 1,989,	2 05¼
Fantasy, b. m. (4), by Chimes, 5,348,	2 06
Ralph Wilkes, ch h. (5), by Red Wilkes, 1,749,	2.06¾
† Stamboul, br. h. (10), by Sultan, 1,513,	2.07½
Arion, b. h. (4), by Electioneer, 125,	2 07¾
Kremlin, b. h. (5), by Lord Russell, 4,677,	2.07¾
Ryland T., b. g. (—), by Ledger, Jr.,	2.07¾
Martha Wilkes, b. m. (9), by Alcyone, 732,	2.08
Azote, b. g. (7), by Whips, 13,407,	2 08¼
Pixley, b. m. (8), by Jay Gould, 197,	2 08¼
Sunol, b. m. (5), by Electioneer, 125,	2.08¼
Trevillian, b. h. (5), by Young Jim, 2,009,	2.08¼
Hulda, b. m. (5), by Guy Wilkes, 2,867,	2.08½
Phœbe Wilkes, b. m. (9), by Hambletonian Wilkes, 1,679,	2.08½
Belle Vera, b. m. (5), by Vatican, 11,318,	2.08¾
Lord Clinton, blk. g. (9), by Denning Allen,	2.08¾
Maud S., ch. m. (11), by Harold, 413,	2.08¾
Palo Alto, b. h. (9), by Electioneer, 125,	2.08¾
Nelson, b. h. (11), by Young Rolfe, 3,517,	2.09
Allerton, b. h. (5), by Jay Bird, 5,060,	2.09¼
Magnolia, b. m. (7), by Haw Patch, 1,140,	2.09¼
Dan Cupid, b. h. (6), by Barney Wilkes, 7,433,	2 09½
Strader H., b. h. (8), by Squire Talmage, 668,	2.09½
Ellard, b. h. (6), by Charley Wilkes, 3,563,	2.09¾
† Guy, blk. g. (13), by Kentucky Prince, 2,470,	2.09¾
Harietta, br. m. (5), by Alcyone, 732,	2.09¾
Jay-Eye-See, blk. g. (6), by Dictator, 113,	2.10
Little Albert, ch g. (9), by Albert W., 11,333,	2.10
Moquette, b. h. (4), by Wilton, 5,982,	2.10
Pamlico, b. h. (9), by Meander, 1,311,	2.10
Walter E., b g. (9), by Patchen Mambrino, 11,835,	2.10

† Rejected performance.

TABLE II.

Showing all heats trotted against time in 2.10 or better, arranged (1) in regard to time made, and (2) chronologically.

2.03¾ —

Alix, b. m. (6), Galesburg, Ill., Sept. 19, 1894.

2.04 —

Nancy Hanks, br. m. (6), Terre Haute, Ind., Sept. 28, 1892.
Alix, b. m. (6), Terre Haute, Ind., Sept. 2, 1894.

2.04½ —

*Alix, b. m. (6), Terre Haute, Ind., Sept. 14, 1894.
Alix, b. m. (6), Columbus, O., Sept. 27, 1894.

2.04¾ —

*Nancy Hanks, br. m. (7), Indianapolis, Ind., Sept. 7, 1893.
Alix, b. m. (6), Indianapolis, Ind., Sept. 6, 1894.

2.05 —

Nancy Hanks, br. m. (6), Nashville, Tenn., Oct. 17, 1892.

2.05¼ —

Nancy Hanks, br. m (6), Independence, Ia., Aug. 3, 1892.
*Alix, b. m. (6), Chicago, Ill., Aug. 21, 1894.
Alix, b. m. (6), Fort Wayne, Ind., Aug. 31, 1894.

2.06 —

*Nancy Hanks, br. m. (7), Chicago, Ill., Sept. 13, 1893.
Nancy Hanks, br. m. (6), New Albany, Ind., Oct. 6, 1892.
Fantasy, b. m. (4), Terre Haute, Ind., Sept. 13, 1894.

2 06¼ —

*Nancy Hanks, br. m. (7), Terre Haute, Ind., Sept. 28, 1893.

2 06½ —

*Nancy Hanks, br. m. (6), Sedalia, Mo., Oct. 27, 1892.
Directum, blk. h. (4), Chicago, Ill., Sept. 15, 1893.
*Alix, b. m. (6), Chillicothe, O., Oct. 6, 1894.

2.06¾ —

*Nancy Hanks, br. m. (7), New York, N. Y., Aug. 31, 1893.
*Directum, blk. h. (4), St. Joseph, Mo , Sept. 23, 1893.
Ralph Wilkes, ch. h. (5), Nashville, Tenn., Oct. 19, 1894.

2.07 —

Nancy Hanks, br. m. (6), Hamline, Minn., Sept. 7, 1892.
Directum, blk. h. (4), New York, N. Y., Sept. 4, 1893.
Fantasy, b. m. (4), Fort Wayne, Ind., Aug. 31, 1894.

2.07¼ —

Nancy Hanks, br. m. (6), Chicago, Ill., Aug. 17, 1892.
Directum, blk. h. (4), New York, N. Y., Sept. 4, 1893.
Fantasy, b. m (4), Rochester, N. Y., Aug. 6, 1894.

* Losing performance.

*Alix, b. m. (6), Indianapolis, Ind., Sept. 6, 1894.

2.07½ —

*Nancy Hanks, br. m. (6), St. Joseph, Mo., Sept. 16, 1892.
†Stamboul, br. h. (10), Stockton, Cal., Nov. 23, 1892.
*Directum, blk. h. (4), Evansville, Ind., Oct. 6, 1893.
*Alix, b. m. (6), Chicago, Ill., Aug. 25, 1894.

2.07¾ —

Kremlin, b. h. (5), Nashville, Tenn., Nov. 12, 1892.
Arion, b. h. (4), Lexington, Ky., Oct. 11, 1893.

2.08 —

Martha Wilkes, b. m. (9), Independence, Ia., Sept. 1, 1892.
*Martha Wilkes, b. m. (9), Chillicothe, O., Oct. 7, 1892.
†Stamboul, br. h. (10), Stockton, Cal., Nov. 5, 1892.
*Nancy Hanks, br. m. (7), Springfield, Mass., Aug. 25, 1893.
Directum, blk. h (4), Hartford, Conn., Nov. 9, 1893.
*Fantasy, b. m. (4), Chicago, Ill., Aug. 25, 1894.

2.08¼ —

Sunol, b. m. (5), Stockton, Cal., Oct. 20, 1891.
Kremlin, br. h. (5), Nashville, Tenn., Nov. 21, 1892.
†Kremlin, br. h. (5), Nashville, Tenn., Nov. 21, 1892.
*Nancy Hanks, br. m. (7), Boston, Mass., Aug. 21, 1893.
*Arion, b. h. (4), Terre Haute, Ind., Oct. 25, 1893.
Ralph Wilkes, ch. h. (5), Nashville, Tenn., Oct. 17, 1894.

2.08½ —

†Stamboul, br. h. (10), Stockton, Cal., Oct. 27, 1893.
Directum, blk. h. (5), Buffalo, N. Y., Aug. 23, 1894.
*Alix, b. m. (6), Lexington, Ky., Oct. 10, 1894.
Ralph Wilkes, ch. h. (5), Nashville, Tenn., Oct. 17, 1894.

2.08¾ —

Maud S., ch. m. (11), Cleveland, O., July 30, 1885.
Palo Alto, b. h. (9), Stockton, Cal., Oct. 17, 1891.
*Arion, b. h. (4), Nashville, Tenn., Oct. 17, 1893.
*Alix, b. m. (6), Philadelphia, Pa., Nov. 7, 1894.

2.09 —

Nancy Hanks, br. m. (5), Richmond, Ind , Sept. 30, 1891.
Nancy Hanks, br. m. (6), Grand Rapids, Mich., Aug. 11, 1892.
*Kremlin, br. h. (5), Montgomery, Ala., Nov. 29, 1892.
*Kremlin, br. h. (5), Montgomery, Ala., Dec. 1, 1892.
Nelson, b. h. (11), Portland, Me., Aug. 12, 1893.
Fantasy, b. m. (4), Saginaw, Mich., July 14, 1894.

2.09¼ —

Maud S., ch. m. (10), Lexington, Ky., Nov. 11, 1884.

* Losing performance. † Rejected performance.

Allerton, br. h. (5), Independence, Ia., Sept. 19, 1891.
*Allerton, br. h (5), Independence, Ia., Sept. 21, 1891.
Nancy Hanks, br. m. (5), Cambridge City, Ind., Sept. 24, 1891.
†Stamboul, br. h. (10), Stockton, Cal., Nov. 19, 1892.
Fantasy, b. m. (4), Buffalo, N. Y., Aug. 9, 1894.

2 09½ —
Allerton, br. h. (5), Independence, Ia., Sept. 25, 1891.
Palo Alto, b. h. (9), Stockton, Cal., Nov. 4, 1891.
*Nancy Hanks, br. m. (6), Chicago, Ill., Aug. 20, 1892.
*Martha Wilkes, b. m. (9), St. Joseph, Mo., Sept. 16, 1892.
†Stamboul, br. h. (10), Stockton, Cal., Nov. 17, 1892.
*Belle Vara, br. m. (6), Chicago, Ill., Sept 16, 1893
Ralph Wilkes, ch. h. (5), Boston, Mass., Sept. 27, 1894.

2.09¾ —
Maud S., ch. m. (10), Cleveland, O., Aug. 2, 1884
*Palo Alto, b. h. (9), Stockton, Cal , Nov. 10, 1891.
†Guy, blk. g. (13), Detroit, Mich., July 21, 1891.
*Stamboul, br. h. (11), Terre Haute, Ind., Oct. 25, 1893.
Directum, blk. h. (5), Buffalo, N. Y., Aug. 8, 1894.

2.10 —
Jay Eye-See, blk. g., Providence, R. I., Aug. 1, 1884.
Allerton, br. h. (5), Independence, Ia., Sept. 4, 1891.
*Allerton, br. h. (5), Independence, Ia., Sept. 9, 1891.
Nelson, b. h. (9), Grand Rapids, Mich., Sept. 17, 1891.
Sunol, b. m. (5), Stockton, Cal., Oct. 13, 1891.
Palo Alto, b. h. (9), Stockton, Cal , Oct. 27, 1891.
Moquette, b. h. (4), Richmond, Ind., Sept. 15, 1892.
Alix, b. m. (4), Nashville, Tenn., Nov. 8, 1892.
Fantasy, b. m. (4), Hamilton, Ont., July 3, 1894.
Directum, blk. h. (5), Chicago, Ill , Aug. 23, 1894.

Table III.

Showing all horses that have trotted heats in races in 2.10 or better, arranged (1) in regard to time made, and (2) chronologically.

2.05¼ —
Directum, blk. h. (4), Nashville, Tenn., Oct. 18, 1893 (third heat).
Alix, b. m. (6), Terre Haute, Ind., Aug. 17, 1894 (third heat).

2.06 —
Alix, b. m. (6), Terre Haute, Ind., Aug. 17, 1894 (first heat).

2.06¼ —
Alix, b. m. (6), Terre Haute, Ind., Aug. 17, 1894 (second heat).

* Losing performance. † Rejected performance.

2.07¾ —

Alix, b. m. (5), Chicago, Ill., Sept. 14, 1893 (first heat).
†Directum, blk. h. (4), New York, N. Y., Nov. 2, 1893 (second heat).
Ryland T., b. g., Cleveland, O., July 26, 1894 (second heat).
Alix, b. m. (6), Boston, Mass., Oct. 20, 1894 (third heat).

2.08 —

Directum, blk. h. (4), Lexington, Ky., Oct. 11, 1893 (third heat).
†Directum, blk. h. (4), New York, N. Y., Nov. 1, 1893 (third heat).
Alix, b. m. (6), Cleveland, O., July 26, 1894 (first heat).

2.08¼ —

Martha Wilkes, b. m. (9), Evansville, Ind., Sept. 29, 1892 (third heat).
Pixley, b. m. (8), Lexington, Ky., Oct. 11, 1893 (third heat.)
Alix, b. m. (6), Cleveland, O., July 26, 1894.
Ryland T., b. g., Cleveland, O., July 26, 1894 (first heat).
Azote, b. g. (7), Terre Haute, Ind., Sept. 11, 1894 (third heat).
Directum, blk. h (5), Portland, Me., Oct. 6, 1894 (third heat).
Trevillian, b. h. (5), Nashville, Tenn., Oct. 16, 1894 (second heat).

2.08½ —

Hulda, b. m. (5), Buffalo, N. Y., Aug. 3, 1892 (third heat).
Directum, blk. h. (4), Lexington, Ky., Oct. 11, 1893 (third heat.)
Phœbe Wilkes, b. m. (9), Nashville, Tenn., Oct. 20, 1894 (first heat).

2.08¾ —

Belle Vara, b. m. (5), Terre Haute, Ind., Sept. 30, 1892 (first heat).
Fantasy, b. m. (3), Nashville, Tenn., Oct. 17, 1893 (second heat).
†Directum, blk. h. (4), New York, N. Y., Nov. 2, 1893 (third heat).
Ryland T., b. g., Cleveland, O., July 26, 1894 (third heat).
Alix, b. m. (6), Buffalo, N. Y., Aug. 6, 1894 (second heat).
Lord Clinton, blk. g. (9), Lansing, Mich., Aug. 24, 1894 (first heat).
Azote, b. g. (7), Lexington, Ky., Oct. 8, 1894 (first heat).
Ryland T., b. g., Nashville, Tenn., Oct. 17, 1894 (second heat).

2.09 —

Lord Clinton, blk. g. (9), Detroit, Mich., July 19, 1894 (first heat).
Alix, b. m. (6), Boston, Mass., Oct. 20, 1894 (first heat).

2.09¼ —

Directum, blk. h. (4), Lexington, Ky., Oct. 11, 1893 (first heat)
Lord Clinton, blk. g. (9), Lansing, Mich., Aug. 24, 1894 (third heat).
Azote, b. g. (7), Terre Haute, Ind., Sept. 11, 1894 (third heat).
Magnolia, b. m. (7), Tiffin, O., Sept. 21, 1894 (third heat).
Phœbe Wilkes, b. m. (9), Chillicothe, O., Oct. 3, 1894 (third heat).
Azote, b. g. (7), Lexington, Ky., Oct. 8, 1894 (second heat).
Azote, b. g. (7), Lexington, Ky., Oct. 8, 1894 (third heat).

---

† Rejected performance.

2.09½ —

Martha Wilkes, b. m. (9), Independence, Ia., Aug. 26, 1892 (third heat).
Directum, blk. h. (4), New York, N. Y., Sept. 2, 1893 (third heat).
Alix, b. m. (6), Cleveland, O., July 26, 1894 (third heat).
Strader H, b. h. (8), Indianapolis, Ind., Sept. 7, 1894 (first heat.)
Azote, b. g. (7), Terre Haute, Ind., Aug. 15, 1894 (fourth heat).
Dan Cupid, b. h. (6), Chillicothe, O., Oct. 3, 1894 (second heat).
Phœbe Wilkes, b. m. (9), Nashville, Tenn., Oct. 20, 1894 (second heat).

2.09¾ —

Alix, b m. (5), Columbus, O., Aug. 24, 1893 (fifth heat).
Directum, blk. h. (4), New York, N. Y., Aug. 30, 1893 (fifth heat).
Pixley, b. m. (8), Chicago, Ill., Sept. 15, 1893 (sixth heat).
Alix, b. m. (5), Chicago, Ill., Sept. 16, 1893 (ninth heat).
Harrietta, b. m. (5), Lexington, Ky., Oct. 10, 1893 (third heat).
Lord Clinton, blk. g. (9), Columbus, O., July 13, 1894 (second heat).
Alix, b. m. (6), Saginaw, Mich., July 14, 1894 (second heat).
Azote, b. g. (7), Detroit, Mich., July 19, 1894 (first heat).
Alix, b. m. (6), Buffalo, N. Y., Aug. 9, 1894 (first heat).
Trevillian, b. h. (5), Terre Haute, Ind., Aug. 17, 1894 (first heat).
Trevillian, b. h. (5), Terre Haute, Ind., Aug 17, 1894 (fourth heat).
Ellard, b. h. (6), Terre Haute, Ind., Sept. 13, 1894 (second heat).
Trevillian, b. h. (5), Nashville, Tenn., Oct. 16, 1894 (third heat).
Phœbe Wilkes, b. m. (9), Nashville, Tenn., Oct. 20, 1894 (third heat).

2.10 —

Martha Wilkes, b. m. (9), Independence, Ia., Aug. 26, 1894 (second heat).
Little Albert, ch. g. (9), Cleveland, O., July 27, 1893 (first heat).
Walter E., b. g. (9), Cleveland, O., July 27, 1893 (third heat).
Directum, blk. h. (4), New York, N. Y., Aug 30, 1893 (third heat)
Magnolia, b. m. (6), Columbus, Ind., Sept. 1, 1893 (third heat).
Azote, b. g. (7), Cleveland, O., July 28, 1894 (third heat).
Pamlico, b. h. (9), Terre Haute, Ind., Aug. 15, 1894 (second heat).
Directum, blk. h. (5), Portland, Me., Oct. 6, 1894 (first heat).
Ryland T., b. g., Nashville, Tenn., Oct. 17, 1894 (first heat).
Azote, b. g. (7), Philadelphia, Pa., Nov. 2, 1894 (third heat).

TABLE OF 2.10 PACERS.

2.01½ —

Robert J., by Hartford, 2.22¼.

2.03¾ —

John R. Gentry, by Ashland Wilkes, 2.17¼.

2.04 —

Flying Jib, by Algona, 11,543.

2.04 —

Joe Patchen, by Patchen Wilkes, 2.29½.
Mascot, by Deceive, 17,552.
Online, 4, by Shadeland Onward, 2 18½.

2.04½ —

Hal Pointer, by Gibson's Tom Hal.

2.04¾ —

Hal Dillard, by Brown Hal, p., 2.12½.

2.05½ —

Direct, by Director, 2.17.

2.05¾ —

Saladin, by Sultan, 2.24.

2.06¼ —

Jay-Eye-See, by Dictator, 113.
Johnston, by Joe Bassett, 13,867.

2.06½ —

Roy Wilkes, by Adrian Wilkes, 6,560.
Strathberry, by Roseberry, 2.15¾.

2.06¾ —

Guy, by Shiloh.
Manager, by Nutwood, 2.18¾.

2.07 —

Silkwood, by Blackwood Mambrino, 12,324.
Vassar, by Vatican, 2.29¼.
W. Wood, by Steinway, 2.25¾.

2.07¼ —

Hal Braden, by Brown Hal, p , 2 12½.

2.07½ —

Ontonian, by Shadeland Onward, 2 18½.
Will Kerr, by Ethan Wilkes, 6,417.

2.07¾ —

Crawford, by Favorite Wilkes, 2.24½.
Directly, 2, by Direct, p., 2 05½.
Reflector, by Duplex, p., 2.17¼.

2.08 —

Rowdy Joe, by Telegraph.
Rubinstein, 4, by Baron Wilkes, 2.18.

2.08¼ —

Blue Sign, by Ensign, 469.
May Marshall, by Billy Wilkes, 2.29½.

2.08½ —

Coastman, by Bourbon Wilkes, 2,345.
J. H. L., by Idol Wilkes, 512.

2.08½ —
Merry Chimes, by Chimes, 2.30¾.
Storm, by Brown Hal, p., 2.12½.
2.08¾ —
Barney, by Barney Wilkes, 7,433.
Seal, by Notary, 11,724.
2.09 —
Bourbon Patchen, by Bourbon Wilkes, 2,345.
Carbonate, 2, by Superior, 2.17¼.
Doc Sperry, by Altamont, 2.26¾.
La Belle, by Lockheart, 2.13.
2.09¼ —
Diablo, 4, by Charles Derby, 2.20.
Prima Donna, by Betterton, 8,022.
Vinette, by Ethan Wilkes, 6,417.
2.09½ —
Moonstone, by Mambrino King, 1,279.
Paul, by Bald Hornet, p., 2.21.
Venture, by Bald Hornet, p., 2.21.
2 09¾ —
Atlantic King, by Atlantic, 2.21.
Coleridge, by C. F. Clay, 2.18.
Ed Easton, 4, by Chimes, 2.30¾.
Fred K., by Shadeland Onward, 2.18½.
Gazette, by Onward, 2.25¼.
Laura T., by Al West, 14,371.
Maj. Wonder, by Maj. Edsall, Jr., 19,183.
Winslow Wilkes, by Black Wilkes, 3,141.
2.10 —
Blanche Louise, by Red Wilkes, 1,749.
Cricket, by Steinway, 1,808.
Edith, by Dexter Prince, 11,363.
Ethel A., 3, by Adrian Wilkes, 6,560.
Guinette, by Gambetta Wilkes, 2.19¼.
Whirligig, 3, by Wilko, 9,733.

LOWERING THE RECORDS

Eighty-eight years ago the world's trotting record was barely within the three-minute limit — 2.59 — and was held by a horse called Yankee, and was made under the saddle. Slow though it was, it stood for four years, and was then lowered only half a second by a "horse from Boston"; so it will be seen

that the "city of beans" has always been "in it" in the fast horse business.

Since that time down to the present time the record has gradually dropped, until the present low mark is reached. The following table shows the course that both the trotting and pacing records have taken from the inception of trotting and pacing speed to the present time:

TROTTERS.

1806	Yankee, saddle,	2.59
1810	A horse from Boston, saddle,	2.58½
1824	Topgallant, saddle,	2.40
1830	Burster, saddle,	2.32
1834	Edwin Forrest, saddle,	2.31½
1843	Lady Suffolk, saddle,	2.28
1844	Lady Suffolk, saddle,	2.26½
1852	Tacony, saddle,	2.25½
1856	Flora Temple,	2.24½
1859	Flora Temple,	2.19¾
1865	Dexter,	2.18¼
1866	Dexter,	2.18
1867	Dexter,	2.17¼
1871	Goldsmith Maid,	2.17
1872	Goldsmith Maid,	2.16¾
1874	Goldsmith Maid,	2.14
1878	Rarus,	2.13¾
1879	St Julien,	2 11¼
1880	Maud S,	2.10¾
1881	Maud S,	2.10¼
1884	Jay-Eye-See (Aug 1st),	2.10
1884	Maud S (Aug. 2d),	2.09¾
1884	Maud S (Nov. 11th),	2.09¾
1885	Maud S,	2 08¼
1891	Sunol,	2 08¼
1892	Nancy Hanks (Aug. 17th),	2.07¼
1892	Nancy Hanks (Aug. 31st),	2.05¼
1892	Nancy Hanks (Sept. 28th),	2.04
1894	Alix (Sept 12th),	2 04
1894	Alix (Sept. 19th),	2.03¾

PACERS.

1835	Oneida Chief, saddle,	2.31
1839	Drover, saddle,	2.30
1844	James K. Polk,	2.23
1849	Dan Miller,	2.23
1851	Tecumseh,	2.21
1852	Roanoke,	2.18½
1855	Pocahontas, wagon,	2.17½
1868	Billy Boyce, saddle,	2.14¼
1879	Sleepy Tom,	2.12¼
1881	Little Brown Jug,	2.11¾
1883	Johnston,	2.10
1884	Johnston,	2.06¼
1891	Direct,	2.05½
1892	Hal Pointer (Aug. 18th and Sept. 22d),	2.05¼
1892	Mascot (Sept. 29th),	2.04
1893	Flying Jib,	2.04
1894	Robert J (Aug. 31st),	2.03¾
1894	Robert J (Sept. 6th),	2.02½
1894	Robert J (Sept. 14th),	2.01½

From the above it will be seen that a period of thirty-seven years was required to effect the reduction of the trotting record from three minutes to 2.30; sixteen years to reduce it from 2.30 to 2.20; fifteen years to reduce it from 2.20 to 2.15; ten years to reduce it from 2.15 to 2.10; and only eight years to reduce it from 2.10 to 2.04; and two years to reduce it from 2.04 to 2.03¾.

Hence, for a period of fifty-one years, the average reduction per year is a trifle less than half a second, and with this ratio kept up until the year 1900, we will have the long-looked for two-minute trotter.

It is my belief that we shall not have to wait longer than this for the fulfillment of this achievement. The reduction of the pacing record is attended with some peculiar features. From 1839 to 1852, a period of thirteen years, the record was reduced from 2.30 to 2.18½, and in 1868 it was placed at 2.14¼ by Billy Boyce.

A period of fifteen years was required for a reduction of 4¼ seconds, to 2.10 by Johnston in 1883. The following year the

record was reduced $3\frac{3}{4}$ seconds, and there it hung for seven years. Eight years were required in reducing the records from $2.06\frac{1}{4}$ to 2.04, where it hung for two years, and then, in a single season, dropped to $2.01\frac{1}{2}$, a reduction of $2\frac{1}{2}$ seconds.

With the trotting record the lower it goes the slower comes the reduction, while with the pacing record the reverse is true, and it seems almost a certainty that the two-minute pacer will be a reality very soon, — probably in 1896.

APPENDIX.

IN concluding this book I feel that while I have faithfully — and, I believe, impartially — mentioned and described many prominent horses, both of the present and past, I feel that the book will be incomplete should I fail to mention more particularly some of the individual animals owned and driven by myself during a period of some forty-five years. While some people care nothing for horses unless they are fast and have records, I have ever estimated them for their general utility and measured them by their general worth. I remember with pleasure many very good roadster and business horses — both mares and geldings — that I have handled during these years; also several well-matched pairs, in which I have taken some pride. Also the stallions I have owned or have had charge of at different periods of my life with the, I think, laudable object of improving the horse stock of America. I will in this connection individualize one hundred or so only of the better ones of the whole lot; in some cases giving their breeding, or partially so. For convenience I will divide them into three classes.

CLASS I. — ROADSTER AND BUSINESS HORSES.

PRINCE ALBERT was my first horse. I bought him of a dealer on my own judgment in 1850, and never bought a better bargain since. He was a steel-gray gelding, six years old, a Morgan, from northern New York, and the very picture of Green Mountain Morgan, as given in this book. (See index to illustrations.) He was about fifteen hands high and weighed 1,000 pounds. This proved a very valuable horse, and his after owner was once offered $500 for him.

FANNY HAZARD. A beautiful bay mare, bred in Vermont,

of the Black Hawk type, and I believe very well bred, yet I never knew her breeding. She was a very spirited, high-strung animal, but with firm and kind usage an extra good one, and a great roadster.

Little Bill. A bay horse of the old New England type, a Rhode Island production, kind and safe in all harness. Called Little Bill from the fact that his former owners had a bay horse named Bill at the time of his purchase, and his name being Bill also they did not realize, perhaps, that they could easily change the name of their new purchase to something else, so called the pair Old Bill and Little Bill — the new purchase being the smaller. I finally sold him to "Old Bill" Watson.

Dobbin. A dappled-gray horse from Canada, and a very good specimen of the Canadian horses as raised in Canada at that time. He was a good horse and quite sagacious. See Sagacious Horses [Chapter XXXIX].

Jim Crow. A coal-black horse with white stripe in face, a young horse from the province of Quebec, Canada, an extra good driver and worker, and an all-around good piece of horse-flesh.

Nellie Gray. A flea-bitten gray mare from the north, either Vermont or Canada. Good driver, high-strung, and had been a puller. Her tongue showed marks of a harsh bit, and had evidently been cut half in two.

Proud Sorrel. A sorrel horse of great style and beauty, making, I think, the most show in harness of any horse I ever sat behind. He was a Morgan horse from Vermont.

Johnny Morgan. A Morgan horse from New Hampshire. A good all-around horse and at home in all harness. In color a Morgan brown, without any white.

Carlo. A beautiful brown horse, with an elongated star and stripe and one white hind foot. Bred in Vermont. Had been owned and used by a doctor previous to my purchasing him; was very kind and clever in all harness, and a great favorite of my women folks as a driving horse.

Kitty. A beautiful gray trotting mare and very fast. At one time the fastest sleigh mare in the city of Providence and the boss of the Pawtucket "pike." A worthy daughter of Vermont Black Hawk.

Nellie Bly. A beautiful dark chestnut mare from Vermont; high-strung, but very sagacious and mentioned among Sagacious Horses in Chapter XXXIX.

Jenny Lind. A mouse-colored mare, with white stripe and one white hind stocking. Raised in North Kingston, R. I., and was descended from the Narraganset Pacer on side of dam; her dam being a black mare formerly owned and driven by Capt. Nat. Reynolds and mentioned in Narragansett Pacers, Chapter IV. She was very high-strung and contrary, but one of the greatest road mares of her time, and no road was too long for her.

Morgan Hunter. A bright, bay, young horse, not fairly broken when I bought him, but proved himself a kind and most excellent general purpose horse.

Brown Bill. A dark-brown horse. A good all-around animal, great roadster, free driver, but became subject to running fits. See Fits [Chapter XLV].

Katy Fisher. A jet-black Morgan mare, with one white hind foot, of the true, old-fashioned Morgan type; bred in Vermont, sired by the Bundy horse. When I purchased her in 1857 she was but four years old and but partially broken, but proved herself one of the very best of her time, and naturally made a good brood mare.

Nancy. A spotted Arabian mare, raised in Rhode Island. Sired by a son of the Arabian horse captured in the war with Mexico and brought to Fort Adams, Newport, R. I., in 1848. She was my first brood mare, raising the first colt ever foaled as my own property in 1858. She proved a good brood mare, breeding after the horse, and continued to breed and raise colts till about thirty years old.

Major. A fine, large, brown gelding, with prominent star — no other white — raised in the State of New York. He

was a powerful, strong-going road horse, and a very high-life animal. I drove this horse a great many miles on the roads of Rhode Island and southeastern Connecticut.

Billy Brown — The Daniel H. Brown horse — A handsome blood bay horse, and quite a good roadster. My mother liked to drive him.

Wild Tom. A red-roan gelding of quite good breeding, his dam being Fanny Hazard, mentioned in this Appendix. He was nearly spoiled in breaking before coming into my hands, and was always considered a wild, unsafe horse, although with me and my rational treatment behaved himself well enough.

Lady Barebones. A beautiful chestnut mare, daughter of Vermont Black Hawk, bred by the Messrs. Goddard of Potowomut, R. I. A very high-life animal, but one of the very best. She once swam from Potowomut to Warwick Neck. She is mentioned among the sagacious ones in Chapter XXXIX.

Matt Morgan. As fine a specimen of the Morgan horse as I ever saw, and, perhaps, as closely bred as any. She was a beautiful bay with full black points, without white, and would have made a picture very like that of Justin Morgan in this book.

Lady Messenger. A beautiful gray mare of Messenger stock — trotting bred — bred by a Dr. Seagur of Connecticut, and one of the finest and best specimens of horse flesh I ever owned.

Tom Hendrick. Iron gray horse from Canada; an extra general purpose animal, and but few of his class could equal him.

Flora Blackhawk. A coal-black mare of the New England Black Hawk stock. A most excellent piece of horse flesh, and held out such till at least thirty years old.

Black Bess. A black mare with elongated star and one white hind foot, about fifteen and three-quarters hands, daughter of Vermont Black Hawk, was one of the very best mares of her day, one of the fastest walkers I ever drove, and would

put up as far from home with a day's drive as the best of them.

Prince. Chestnut gelding from Vermont. A good specimen of the Morgans; too high seasoned for general use, but a great, never-tire, all-day roadster. I once drove him from New London, Conn., to the Dimon Stock Farm in Pomfret, same State, some seventy miles over a very hilly road one of the hottest days of the year 1877 in less than ten hours and the thermometer registered 97 degrees in shade, and I did not have a tired-out horse by any means when I got home.

Cora Linn. Bay mare, two white feet, by Gage's Logan, son of Rysdyk's Hambletonian, dam the fast Morgan trotting mare Fanny King; bred by B. F. Holley, Momence, Ill., of whom I purchased her for $500 when unbroken singly. She came as near being an india-rubber animal as any I ever owned. I frequently drove her from the "Dimon Stock Farm" to Providence, R. I., and back same day, some sixty-six miles, and frequently with quite a load one way, and sometimes both ways. She lived to be quite along in years, and finally did a good day's work the very last day of her life. She was the dam of the trotting horse, Gov. Dimon, by Sprague's Hambletonian. (See Sprague's Hambletonian, Chapter IX.)

Fanny Kenyon. A beautiful dappled gray mare, and one of the handsomest I ever saw when in her prime; sired by Rhode Island, 2.23½, son of Whitehall. I purchased her as one of the brood mares for the "Dimon Stock Farm" in 1873. She was the dam of the fast trotting horse, Col. Sprague, by Sprague's Hambletonian. (See Sprague's Hambletonian, Chapter IX.)

Island Nellie. A sorrel mare with white stripe in face, no other white; bred by the author and taken to "Dimon's Stock Farm" as one of the brood mares of that once celebrated stock farm, and was the dam of "Dimon's Morgan," "Plow Boy," etc.

Peerless. A light bay mare, some white in face, and one

white stocking behind; bred in Vermont, sired by Ethan Allen, her dam a Morgan mare, pedigree untraced. One of the freest drivers and greatest road mares I ever owned. I let Hon. John E. Russell of Leicester, Mass., have her one season as a driving mare and to breed to his stallion, Privateer.

Fearless. Sorrel mare, no white markings; a well-bred daughter of Fearnaught, by Young Morrel, dam untraced. One of the best free driving mares I ever used, but too high-strung and rattle-headed for anything but a driver.

Hunkadora was a dark chestnut trotting mare, bred in Vermont, and sired by Osceola, son of Black Hawk. She was something of a puller — very much so when I first bought her — but could come as near flying as any horse I ever rode after.

Minnie Boston. Thoroughbred bay mare; one of the brood mares of the "Dimon Stock Farm," sired by Imported Bonnie Scotland, dam Kate Boston, by Lexington, 2d, dam Ann Stevens, by Imported Trustee. I paid Pierre Lorillard, the great tobacco prince of America, $500 for her, she being in foal at time of purchase to Imported Canwell, and produced Lord Canwell, which I afterwards sold to go to South America as a stock horse. She also produced Minnie Russell, by Privateer, Minnie Dimon, and others.

Alma Dimon. A beautiful Morgan mare, brown, with stripe and one white foot, colored and marked exactly like Smuggler, 2.15¼. I drove this mare in Boston and vicinity in 1883, and took her West in 1884. She was the dam of Midair, by Midway, son of Almont.

Kittie Walker. A dark chestnut mare of the Royal George stock of Canada, with a strong thoroughbred cross. She was one of my driving mares during the time I had charge of the Essex Stock Farm in Essex County, Ontario, Canada. I consider her among the greatest driving horses I ever drew rein over. I have driven her through the streets of Detroit at a 2.30 gait in a buggy, and have very narrowly escaped being fined for fast driving, and, perhaps, would have been had they a mounted police with horses fast enough for the

purpose. When I took this mare in hand she was considered a rank puller. I soon got her out of that notion by using a humane bit, and she proved to have one of the most sensitive and best of mouths, and I could play any tune on it I wished with the reins, just as a harper would play the harp with the strings.

Rosa. A beautiful sorrel, without white, half-thoroughbred mare was another of my driving horses at the Essex Stock Farm. She was put into my hands as being somewhat tricky and unsafe, but proved with me a most excellent mare and safe. I could talk her into anything, even to standing still on the streets of Windsor, Ont., while a troop of elephants belonging to Barnum's show passed by. With this mare I gave a young man the surprise of his life who thought he had a fast one, by driving completely around him within less than a mile on the road.

Roan Prince. A roan gelding of the Royal George stock of Canada, was a very easy and pleasant roadster for a thirty to fifty-mile drive.

Kittie Maxwell. Gray mare, by Informer, son of Jay Gould, by Hambletonian, was about as handy stepper and easy mover as I ever drove, but had been badly handled before I bought her, and was considered very unsafe, requiring much watching, still I never had an accident with her.

Sorrel Bill. Sorrel gelding, breeding unknown; still it must have been good, as he had the "ear marks" of a well-bred one. An extra good buggy and livery horse. I used him in my livery business in Detroit. A great favorite with my lady customers.

Maggie Dimon. A jet black mare, star, snip, and one white foot behind, extra well-bred. Took her to Indiana as a brood mare. The dam of Maud Bayard by General Bayard, son of Bayard, by Pilot, Jr., the sire of the dam of Maud S, $2.08\frac{3}{4}$.

Minnie Morgan. Seal brown mare with tan muzzle, no white, a veritable old-fashioned N. E. Morgan. I took her to Indiana with me for a brood mare and kept her seven years; she was a very good mother and grew her colts very fast; was

the dam of Pilot Morgan, Bayard Morgan, Morgan King, etc.

Nellie Fearnaught. Bay mare, without white, sired by Sawtelle's Fearnaught, dam Nellie Bashaw, by Black Bashaw. Good road mare, very handsome and stylish, and a good brood mare.

Golden Rule. Bay mare, with star and snip, bred in Michigan, sired by Shadeland Prince, son of Enchanter, by Administrator, dam by Golden Bow, sixteen hands high, an excellent mare for all business, very intelligent and level-headed. Has proved herself a good brood mare, is now my driving mare, and I take but little dust from any of them.

Amanda Brown. Gray mare, by Joe Brown, 2.22. One of the most resolute go-ahead driving and business mares I ever owned or used.

Blanche Wayne. Light bay mare, white stripe and one white stocking behind, sire Anthony Wayne, 2.31½, son of Andy Johnson, by Henry Clay, dam by Blue Bull (75), a medium size all-around good one, perfectly at home in all harness, and one of the best single field horses I ever owned. She is dam of "Queen of the West," by Stockton King.

Belmont Maid. Black mare, by Belmont Prince, was a game easy-going driving mare, and is mentioned among the sagacious ones in this book. (See Chapter XXXIX.)

Maud Bayard. Gray mare, by General Bayard, now five years old, dam Maggie Dimon. I bred her and still own her, and consider her among the best for general use, driving included, I ever bred.

Mary Brown. Solid black mare, four years old, at this writing with a fine Stockton King colt "Dimoneer," at foot, and again in foal to same horse. She was sired by General Bayard, and is standard-bred and recorded.

CLASS II. MATCHED TEAMS.

Charley and Tiger were sorrel geldings with white stripes in faces. They were matched by myself, and were my first

pair of really matched ones, and of which I felt quite proud. They were young, sound, and quite speedy, and sold for a good price to go to Newport, R. I.

Dollie and Nellie were black mares bred in Vermont, and sired by Vermont Black Hawk. They were handsome, kind, and good drivers and workers in all harness. I finally used them as brood mares, and "Nellie" was the dam of "Island Nellie," Class I, this Appendix.

Major and Colonel were bay geldings of good weight and a first-class and valuable team for general use.

Mary Lee and Hattie C. were dapple gray mares, bred in Canada. I owned and drove them on the road somewhat in 1859. They were good trappy roadsters and attracted considerable attention.

Charlie and Prince were sorrel geldings, and quite well-matched. Charlie was a southern horse and was used in battle as a war horse, and was ridden by both a southern and northern officer. Captured by northern army and brought to Providence, R. I. Prince was a Rhode Island production.

Fanny Fern and Dollie Hale were bay mares with white stripes in faces and white stockings behind, were own sisters, extra well-bred, sired by Imported Consternation, bred in Herkimer County, N. Y., and purchased at a long price as brood mares for the "Dimon Stock Farm." They both proved to be excellent in all places. "Fanny Fern" was the dam of Confidence, Fanny Allen, etc., and Dollie Hale was the dam of "Dimon's Pathfinder" and Goldfinder.

Calzadilla and Canzonet were beautiful dapple gray mares, bred by Henry S. Hutchins of Pomfret, Conn. They were from good stock and among the best of their day. I remember them to-day with feelings both of pleasure and of sorrow. I traded this pair to a gentleman in the State of New York, even, for twenty-two head of cattle.

Brown Bess and Indiana Belle. Seal brown mares with tan muzzles, the former bred in Canada, and the latter in Indi-

ana. I matched this pair of mares when many miles apart, and they were as near a perfect match as could well have been. I sold them in spring of 1882 to the Storrs' Agricultural School of Connecticut.

Frank and Fred, sorrel geldings bred in Canada. They were good general purpose horses, both double and singly.

Charley and Ben were a very good pair of well-matched black geldings bred in Indiana. Good in all harness and good drivers, double or single. I sold them to Hoffman Bros., Fort Wayne, Ind.

Golden Rule and Shadeland Queen were a pair of beautiful bay mares sixteen hands high and weighing 1,200 to 1,300 pounds each. I purchased them of their breeder in Pontiac, Mich. They were, taken all in all, when five years old — at the time of purchase — about the best coach team I ever saw (or at least one of the best). I purchased them for brood mares — as they were exceptionally well-bred — and took them to "Fern Hill Stock Farm," Fort Wayne, Ind. I had the misfortune to lose Shadeland Queen soon after the purchase. Golden Rule I still own at this writing — Aug. 7, 1895, and but few men ever owned a better mare.

Jim Blaine and Fritz were a good pair of bay geldings, matched by myself. One was bred in Indiana and one in Kentucky, both from trotting-bred stock. They were good drivers and splendid workers, double and single, and safe.

CLASS III. STALLIONS.

Bengal Tiger. A beautiful buckskin or dun-color with striped legs, a black stripe running length of back with black mane and tail, was my first. I purchased him in 1851, when a three-years old, and broke him myself. While pedigree was of but little account in those days, and in that section, as compared with the present, the pedigree of this colt was considered to be very good, and traced back to the Narragansett Pacer. (See Chapter IV.)

Black Highlands. A beautiful jet black horse with star

and one white foot behind, a grandson of Vermont Black Hawk, was my next purchase, and no man ever yet owned a handsomer one. He proved himself a good stock horse and improved the stock of Southwestern R. I. quite considerably.

Emanuel. A beautiful dapple gray, was my next. He was the grandson of an Imported Arabian mare crossed on a Morgan stallion, and was quite a popular horse of his time, locality considered.

Narragansett. A red-roan was my next stallion. He was quite a good horse, and traced to the Narragansett pacing family.

Uncle Tom, (black and all black,) was a black Morgan horse of the old Vermont stock, tracing in an unbroken line to Justin Morgan.

Main's Morgan was a brown Morgan horse with no white, was considered quite well-bred and sired good stock, "Island Nellie" among others.

Island King was a buckskin with full black points, quite a fine horse, and tracing to the Narragansetts with a Morgan "top cross" — as the short-horn breeders would say.

Dimon's Pathfinder. A bright bay horse without white, one of my own breeding and one of the finest of his day. He was a cross between the best branch of the Morgan family, and the thoroughbred, his dam being Dollie Hale, by Imported Consternation.

Confidence. Black with white stripe and one white stocking behind, bred similar to Pathfinder, his sire being the Morgan Stallion "Potter Horse," and his dam Fanny Fern, sister to Dollie Hale, by Imported Consternation. He was also bred by myself.

Goldfinder. A mahogany bay, solid color, bred at Dimon Stock Farm. Sire Figaro, by Imported Consternation, dam Dollie Hale, by Imported Consternation. A blood horse and showing his breeding. A fine animal.

Hampton Court. Imported thoroughbred. Foaled in 1864. Bred by Mr. C. C. Greville at Hampton Court Paddocks, Eng-

land. Imported by R. W. Cameron of Clifton, Staten Island, in 1865. Got by Young Melbourne, dam Durindana, by Orlando; second dam, Dispatch, by Defence; third dam, Nannette (sister to Glaucus), by Partisan; fourth dam, Nanine, by Selim; fifth dam, Bazarre, by Peruvian; sixth dam, Violante, by John Bull; seventh dam, sister to Skyscraper, by Highflyer; eighth dam, Everlasting, by Eclipse; ninth dam, Hyæna, by Snap; tenth dam, Miss Bulsea, by Regulus; eleventh dam, by Bartlett's Childers; twelfth dam, by Honeywood's Arabian; thirteenth dam, Byerley Mare, bred by Mr. Bowes, the dam of the two True Blues.

Hickory Star. A chestnut horse, by Hickory Jack, son of Ethan Allen, dam crossed on thoroughbred stock. A handsome horse of the Ethan Allen type.

Lord Canwell. Thoroughbred. Sire Imported Canwell; dam Minnie Boston, by Imported Bonnie Scotland. He was a natural trotter. Solid bay in color. I sold him to go to South America for stock purposes.

Sprague's Hambletonian. Brown bay horse, without white. One of the best individual sons of Alexander's Abdallah; dam a Morgan mare, pedigree untraced. He was formerly called New York, and was, with his mate, Belle Brandon, at one time the fastest road team in New York city. He sired Gov. Sprague, 2.22½ (five-years'-old record), in 1870; Gov. Dimon and Col. Sprague in 1875. His stud services were very limited, and he died in Pomfret, Conn., in 1876. He also sired Boston Boy Hambletonian, 2.25, and a few (very few) others.

Boston Boy Hambletonian, 2.25. A bay horse sired by Sprague's Hambletonian (see above); dam Boston Girl, etc. Stood for mares at Dimon Stock Farm season of 1877, and I drove him some on the road. A strong-moving horse.

Comus. Chestnut horse, without white. A beautiful son of Green's Bashaw and Topsy, by Prophet, son of Black Hawk. I kept him at the Dimon Stock Farm for mares and for driving purposes, and while his duties in the stud were quite light, he

was one of the finest and most beautiful gaited road horses I ever drove. I bred several mares of my own to him in 1877.

Midway. A beautiful seal-brown horse, sired by Almont, son of Alexander's Abdallah; dam Madam Cowper, by Mambrino Chief. He was a beautiful-dispositioned horse. I handled and drove him in Boston in 1883. He could trot better than 2.30, but was never raced. I bred to him.

Beacon Light. A beautiful bay colt, by Daniel Lambert; dam Emma, by Columbus. I raised him. He was of the Ethan Allen style and pattern. I took him West. Took first premium in his class at the great Canadian fair in Toronto, Canada, in 1884.

Cute. Bay horse, by Strathmore; dam a well-bred mare; quite a gamey little horse. Name afterwards changed to Detroit. Not very successful either as a sire or trotter.

H. G. Bay horse, by Rysdyk and half brother to Clingstone, 2.14. Quite a showy horse and a fair driver, and his stock quite good.

Adonis. Mahogany-bay horse, sire the thoroughbred horse Gen. Custer, dam a well-bred Canadian mare.

Dandy. Brown bay. Imported Exmoor pony, imported from England in 1881; formerly belonged to the Queen's stud.

Romulus. Dapple-gray imported Percheron stallion. [See cut in this book.] Imported in 1881 from Perche, France. I took the gold medal with him at Canada's great fair at Toronto in 1884, over all draft horses.

Marquis. Gray imported Percheron. Imported in dam Cozette, sire Romulus, as above. A very good specimen of this breed.

Hugo. Black imported Percheron stallion, weighing 1,900 pounds at maturity. Good type and quite a good sire.

Midair. Brown stallion, sire Midway, son of Almont, dam Alma Dimon, etc. [See driving and business horses.]

General Bayard. Gray horse. Best individual son of Bayard, 2.31¼, the best son of Pilot, Jr., sire of dams of Maud S., 2.08¾, Jay-Eye-See, 2.10, etc., etc. Bayard sired Kitty

Bayard, 2.12¼, the world's trotting record on half-mile track; dam of General Bayard, Adalia, by Administrator; second dam by Gill's Vermont. A natural trotter and good sire.

Thornhedge. A beautiful bay horse of the Morgan type, sire Venture, by Aristos, son of Daniel Lambert; dam the great brood mare Nannie Thorne, by Hamlet, and dam of Thornless, 2.15¾, and Little Thorn, 2.22½, etc.

Decoration. Sorrel, white stripe, and two white stockings; sire Strathmore, dam Folly, by Billy Denton, son of Hambletonian, etc.

Pilot Morgan. Black colt; sire Gen. Bayard, by Bayard, son of Pilot, Jr., dam Minnie Morgan. (See Roadster Class.)

Bayard Morgan. Gray colt; sire Gen. Bayard, dam Minnie Morgan, as above — own brother to Pilot Morgan.

Indiana Chief. Bay colt; sire Gen. Bayard, dam Golden Rule, by Shadeland Prince, son of Enchanter, etc., second dam by Golden Bow, etc., etc.

Stockton King, 22,407. Blood bay horse, foaled May 4, 1890; bred by Hon. L. U. Shippee, Stockton, Cal. Sire Campaign, 9,801, the best trotting-bred son of the great Electioneer, with 155 in the 2.30 list, 35 of that number in the 2.20 list, four in the 2.12 list, and of Sunol, 2.08¼; dam Right Motion, by Motion, 2.29, son of the great Daniel Lambert, with 38 in the 2.30 list; second dam Columbus Mare, by Columbus (95) with 11 in the list. This young horse represents the Hambletonian, Clay, Morgan, Mambrino, American Star, Columbus, and Pilot, Jr., families and is unquestionably intensely trotting bred, as shown by the records. Bred in the purple but feebly expresses the quality of his breeding.

Above I have named a few of the many I have owned and handled in my lifetime. Many, and, in fact, most of them, are dead, but none, as I am aware of, have had shafts of marble erected to their memory like Hambletonian and some few others, although some of them may have been quite as deserving.

Are horses immortal? Do they have souls? Shall we meet them again?

I dare not say they do, and you cannot say they do not, for we neither of us know.

In adding this Appendix containing this galaxy of somewhat celebrated and useful horses, my object was not to set forth their merits above others or to boast of their ownership, but give it as history intended to act as an object-lesson to the breeder, and hoping it may be of interest to the general reader of this book.

In conclusion, I feel that I have a right to claim that I have been honest in my intentions, and that I have endeavored, and I hope succeeded, in giving to the world a true and impartial history of the horse. I feel that the writing and publishing of this book has been the one great effort of my life, and that the book itself will be a lasting monument to my memory and will do far more towards perpetuating the same than any granite or marble monument could possibly do. I have confidence enough in the work to believe it will become the leading and standard work on the horse in America and the world.

If my teachings shall have the effect of ameliorating the abuse of this noble animal during his short life as the faithful servant of man, I shall feel that I have accomplished a mission, perhaps the mission of my life.

While steam and electricity are fast usurping the horse, there are yet, and ever will be, many, very many, things, business-wise and pleasure-wise, wherein his place will never be filled, and the breeding of horses in the future, as in the past, will ever be a legitimate, permanent, and, when properly and scientifically conducted, *profitable* business. Steam travel has usurped stage travel, and electricity will soon usurp steam, but the *horse* has come to stay.

THE OLD TURNPIKE.

Selected.

"We hear no more the clanging hoof,
And the stage-coach rattling by,
For the steam-king rules the travel world,
And the old pike's left to die.
The grape creeps o'er the flinty path,
And the stealthy daisies steal
Where once the stage horse, day by day,
Lifted his iron heel.

"No more the weary stager dreads
The toil of the coming morn;
No more the bustling landlord runs
At the sound of the echoing horn;
For the dust lies still upon the road,
And the bright-eyed children play
Where once the clattering hoof and wheel
Rattled along the way.

"No more we hear the cracking whip,
And the strong wheel's rumbling sound;
And ah! the water drives us on,
And the iron horse is found!
The coach stands rusting in the yard,
And the horse has sought the plow;
We have spanned the world with an iron rail,
And the steam-king rules us now.

"The old turnpike is a pike no more;
Wide open stands the gate;
We have made us a road for our horse to stride,
And we ride at a flying rate;
We have filled the valleys and leveled the hills,
And tunneled the mountain side,
And round the rough crag's dizzy verge,
Fearlessly now we ride.

"On — on — on, with a haughty front,
A puff, a shriek, and a bound;
While the tardy echoes wake too late
To echo back the sound;

And the old pike road is left alone,
And the stagers seek the plow;
We have circled the earth with an iron rail,
And the steam-king rules us now."

THE ELECTRIC.

The warning bell is sounding;
The moving air I feel;
The car goes by me bounding
O'er throbbing rails of steel.

My mind it doth bewilder,
These wondrous things to scan,
Awed not by man, the builder,
But God, who made the man.

INDEX.

Abdallah, ... 84
Ability to Match Horses, . . 283
Accident to Author, ... 240
Acute Founder, ... 367
Administrator, ... 88
Administering Chloroform, . 403
Advertising Quack Medicines, . 340
Age, ... 155, 306
Age as Shown by the Teeth, . 300
Ailments, and How to Doctor them, 351
Alexander, Robert A., . . . 90
Alexander's Abdallah, . . . 90
Alexander's Norman, ... 57
Allen, Caleb, ... 64
Alma Mater, ... 228
American Clay, ... 107
American Girl, ... 223
American Star, ... 87
American Trotter, ... 117
Andrew Jackson, ... 106
Andy Johnson, ... 107
Appendix, ... 425
Arion, ... 186
Arabian Horses, ... 35
Arabian the Primitive Blood-horse, 36
Arabian Horse Breeders, . . 39
Arabs as Foundation Stock, . 36
Arabian Horse Darley, . . 37
Arabs at World's Fair, 1894, . 43
Author's Remarks, ... 21
Author's Experience, ... 21
Author as a Judge in Races, . 271
Author's Experience in Swapping Horses, ... 292

Backman, Charles, ... 93
Balancing, ... 326
Balking, ... 243
Bandages, ... 278
Bars of the Foot, ... 321
Barnum, P. T., ... 340
Bashaw (Green's), ... 107
Bashaws and Clays, . . . 106
Battle of Bunker Hill, . . 41
Bayard, ... 317
Bay as a Color, ... 404
Beacon Light, ... 437
Beautiful Bay, ... 61
Beautiful Bells, ... 227
Belle Brandon, ... 91
Belfounder, ... 83
Belmont Maid, ... 313
Big Head, ... 272
Birth of an Arab Foal, . . 39
Bishoping, ... 305
Biting, ... 249
Black Bashaw, ... 107
Black Douglass, ... 204
Black Hawk, ... 65
Black Highlander, ... 434
Black Horse of Flanders, . . 138
Bladder, Inflammation of, . . 376
Blanche Wayne, ... 432
Blankets, ... 261
Blindness, ... 356
Blistering, ... 358
Blister Ointment, ... 348
Blue Bull, ... 109
Bone Spavin, ... 351
Bonner, Robert, ... 222
Boot, James, ... 82
Boston, ... 49
Boston Boy Hambletonian, . 91
Bots, ... 357
Box Stall, ... 159
Bowen, Henry C., ... 21
Breaking Foals, ... 175
Breaking and Training, . . 229

Breathing, ... 349
Breeding a Scientific Study, . 145
Breeds, ... 33
Breeding a Progressive Science, 118
Breeding Stock, ... 177
Breeding Stylish Roadsters, . 178
Breed for a Purpose, . . 145, 177
Breeding the American Trotter, ... 118, 177
Brighton, Mass., ... 292
Brittle Hoof, ... 356
Bronchitis, ... 355
Brood Mares, . . . 152, 164
Brown, George E., ... 127
Buying Horses, ... 283
Buying and Selling, . . . 281

Canadian Horses, . . 28, 56
Canadian Blood in American Trotter, ... 57
Care and Management of Stallions, 159
Care of Brood Mares, . . . 164
Care of the Mouth, . 259, 276, 349
Care of Warm Horses, . 288, 277
Care of the Foal, . . 168–171
Care of Weanlings, . . . 175
Capped Hocks, ... 362
Capet, Hugh , ... 129
Cassius M. Clay, ... 106
Castration, ... 401
Cataract, ... 358
Chance Trotters, ... 121
Charles Kent Mare, ... 82
Check Reins, ... 267, 332
Chloroform, ... 403
Clamps, ... 402
Cleveland Bay, ... 125
Clydesdale, ... 139
Clydesdale Society of America, . 140
Climatic Influence, . . 28, 56
Coachman, ... 287
Color of Horses, . . . 182, 315
Collar Galls, ... 372
Coffin Joint, ... 354
Colic, ... 360
Col. Jenifer, ... 41
Col. Sprague, ... 91
Color and Weight of Morgans, . 63
Columbus, ... 57
Columbus, Christopher, . . 26
Comparative Age of Horse and Man, ... 306
Conditioning, ... 403
Connecticut Cavalry, ... 40
Connecticut Original Home of American Trotter, . . . 123
Controlling the Stallion, . . 162
Corn as Food, ... 257
Corn Meal, ... 257
Cora Linn, ... 312
Corns, ... 364
Cough, ... 363
Country Circus, ... 399
Crane Horse, ... 73
Curbs, ... 362
Cut Feed, ... 260

Daniel Lambert, ... 67
Darley Arabian, ... 45
Decker, John B., ... 211
Delaware Maid, ... 202
Dentition, ... 300
De Soto, ... 31
Dexter, ... 221
Diamond, ... 61
Diarrhea, ... 365
Dimon, John J., ... 354
Dimon Stock Farm, ... 241
Dimon's Black Oil, ... 346
Dimon's Condition Powders, . 347
Dimon's Colic Remedy, . . 346
Dimon's Leg Wash, ... 347
Dimon's Pathfinder, ... 435
Dimon's Spavin Cure, . 346, 353
Dimon's Stable Liniment, . . 347
Diomed, ... 48
Distemper, ... 364
Doble, Budd, . . . 211, 221
Docking (*Illus.*), . . . 406
Dollie, ... 228
Draft Horses, ... 135
Driving long distance, . . 266
Driving by the watch, . . 279
Drooping of the head, . . 349
Drying up the Sweat, . . 366
Dusky Jane, ... 195

Early Foals, ... 184
Early Importations, . . . 48
Early Maturity, Early Decay, . 273
Early Training for Speed, . . 237
Ears, ... 349
Electioneer, ... 93
" Roll of Honor, . . 96
Elliot, Eli, ... 143
Emma B., ... 246
Endurance of Morgans, . . 76
English Draft, ... 137
English Shire, ... 137
Ethan Allen, . . 66–80, 209
Eyes, ... 349
Exhibition of Horses, . . . 318
Exercise the Stallions, . . 160

Fame, ... 400
Families of Arabians, . . . 38
Fanny Fern, ... 311
Fanny Kenyon, ... 312
Farm Teams, ... 262
Fastest trotting records all ages, 411
" " " all ways going, ... 411
Fastest pacing records all ages, 412
" " " all ways going, ... 412
Fastest running records, . . 413
Fearnaught, ... 47
Feeding the Foal, . . . 173
Feeding and Stable Management, 256
Fever, ... 356
Fireaway family of trotters, . 83
First Importation to Canada, . 27
" " " Mass., . 27
" " " New York, 27
" " " U. S., . 26
" " " Virginia, . 27
Fistula, ... 367
Fits, ... 370
Flanks, ... 349
Flax Seed for Horses, . . 261
Flora Temple, ... 199
Food and Climatic Influence, . 28
Foot, ... 319
Founder, ... 367
Fractures or broken bones, . 370

French Canadian, . . . 56
French Coach, ... 128
Frog, ... 320

Galaxy of Celebrated Horses, . 425
Galls, ... 372
Gangrene, ... 374
Gen. Bayard, ... 437
Gen. Grant's Fourth of July Visit to Connecticut, . . . 23
Gen. Putnam, ... 41
Gestation Period, . . . 165
Getting Doubtful Mares in Foal, 164
Gentlemen Horsemen, . . 401
Geo. M. Patchen, . . 106, 215
George Wilkes, . . . 87, 216
Giving Medicine, . . . 345
Glanders, ... 373
Godolphin Arabian, . . . 45
Golden Rule, ... 242
Goldsmith, Alden, . . . 211
Goldsmith Maid, . . . 211
Good Care Secret of Success, . 185
Gov. Dimon, ... 91
Govt. Studs of France, . . 128
Grand Bashaw, . . . 41, 106
Grassing the Stallion, . . . 161
Gray Horses, . . . 42, 315
Great Age of Horses, . . . 306
Great Trotting Brood Mares, . 226
Grease Heel, ... 385
Green's Bashaw, ... 106
Greek Mythology, . . . 30
Green Mountain Maid, . 95, 226
Green Mountain Morgan, . . 73
Grooms, ... 255, 341
Grooming, ... 163
Guard Against Overwork, . . 238

Hambletonian (Rysdyk's), . . 82
Hambletonian's Stud Career, . 86
Handling the Reins, . . . 222
Handling and Managing Trotters, 271
Handling the Foal, . . . 175
Harness Galls, ... 372
Hawkins, Jonathan, . . . 221
Heaves, ... 375
Henry Clay, ... 106

High Heels, ... 329
Highland Maid, ... 204
High Prices for Hambletonians, 87
Hill, David, ... 66
High Prices for American Trotters, ... 186
High Prices for Thoroughbreds, 50
High Stallion Fees, . . . 51
Hitching to Carriage, . . . 267
Holcomb, J. W., ... 66
Horse Ailments and How to Doctor, ... 362
Horse Breeding, ... 145
Horse in Slings, ... 368
Hugging the Lines, . . . 250
Hunter, Dr. John, . . . 339

Immortality of the Horse, . . 30
Imported Belfounder, . 82, 88
Imported Messenger, . . 47, 244
Imported Rambler, . . . 53
Imported Traveler, . . 46, 61
Index to Illustrations, . . 15
Indian War Bridle, . . . 251
Indigestion, ... 377
Inflammation of the Bladder, . 376
" " Bowels, . 379
" " Eyes, . . 378
" " Kidneys, . 378
" " Lungs, . 379
" " Womb, . 378
Influence of the Dam, . . 156
Injections, ... 172, 379
Introduction, ... 19
Ishmael Pacha, ... 41

January 1st, Age Commences, . 185
Janus, ... 46
Jealous Mothers, . . . 170
Jenifer Arabian, ... 41
Jockey Tricks, ... 290
Joseph the First Horse Dealer, . 1
Jogging, ... 275
Johnny Morgan, ... 208
Justin Morgan, . . . 41, 60

Kate, ... 57
Kicking in Harness, . . . 247
Kidneys, ... 256
King Thomas, ... 50
Kitty Bayard, ... 316

Lady Franklin, ... 207
Lady Suffolk, ... 195
Lady Thorne, ... 212
Lampas, ... 380
Lameness, ... 380
Language of Horses, . . . 317
Lancet, ... 207
Last Message of Ethan Allen, . 81
Lexington, ... 49
Lice, ... 381
Light and Ventilation, . . 261
Lindsey Arabian, . . . 39
Linsley, Daniel C., . . . 61
Linseed Meal, ... 265
List of 2:10 Trotters, . . . 414
" " " Pacers, . . . 416
Little Neck Beach, R. I., . . 54
Location, ... 282
Locked Jaw, ... 381
Lowering the Records, Trotting, 421
" " " Pacing, . 423
Lung Fever, ... 380
Lying Down, ... 349

Maggie Dimon, ... 313
Mahomet, ... 35
Management of Farm teams, . 262
" " Teams on the Road, . . 264
" " Road and Driving Horses, . 266
" at Foaling time, . 168
" of the Foal, . . 171
Mange, ... 382
Mares of Mahomet, . . . 36
Marking the Foal, . . . 165
Marvin Charles, . . . 96
Membrane of the Nose, . . 348
Messenger, ... 47
Miscellaneous, ... 400
Miss Russell, ... 227
Molar Teeth, ... 301
Molburn, Rufus, . . . 313
Morgan Cæsar, ... 73
" Horses, . . . 60

Morgans as Roadsters, . . 60
" " Stagers, . . . 74
" " Trotters, . . . 79
Mouth, . . . 239–276, 349
Motion, ... 67
Mount Hope, R. I., . . . 19

Naming the Colt, . . . 175
Narragansett Bay, . . . 53
" Beach, . . . 53
" Pacer, . . 52, 123
National American Trotter, . 118
" Trotting Horse, . . 118
" Studs of France, . . 128
Nature's great law, . . . 145
Nellie Bly, ... 310
Nippers, ... 301
Nose an Indicator, . . . 348
Noted Sons of Hambletonian, . 87
Number of Mares to a Stallion, . 162

Oats as Food, ... 257
Old Abb, ... 211
" Abdallah, ... 84
" Age, General Signs, . . 305
" Dolly, ... 228
" Country Circus, . . . 399
" Time Trotters, . . . 189
" Turnpike, ... 440
One Eye, ... 84
Overdraw Check, . . 248, 333
Opening of the Heels, . . 327
Origin of the Narragansett Pacer, 52
Overwork, ... 237

Pacers, 2:10, ... 419
Pacing Standard, . . . 408
Paddock, ... 159
Palmer, Thos. W., . . . 43
Pampered Stallions, . . . 160
Pastern Bones (*Illus.*), . . 354
Patience in Training, . . . 229
Pawing in Stall, ... 251
Pearce, Daniel, ... 52
Percherons, ... 135
Perrin, Geo. E., ... 302
Physic Ball, ... 348
Pilot, ... 57
Pilot Medium, ... 317
Plan of this Book, . . . 23
Pleuro-Pneumonia, . . . 382
Pointing with the Nose, . . 350
" " Fore Foot, . 350
Poll Evil, ... 383
Positive Breeders, . . . 156
Potency of Belfounder, . . 83
Preface, ... 17
Prince Albert, ... 425
Percherons as Draft Horses, . 136
" " Road Horses, . 137
Priam, ... 48
Principles of Breeding, . . 146
Proud Flesh, ... 382
Pulse, ... 348
Pulling on the Halter, . . 250
Purchase of Ranger, . . . 40
Pulling on the Bit, . . . 239

Quacks, ... 342
Quack Medicines, . . . 340
Quittor, ... 383

Raising by Hand, . . . 173
Rambler, ... 53
Ranger, ... 40
Rarey, J. S., ... 242
" cord, ... 252
Rat-tail, ... 394
Reducing the Records, . . 123
Richards, A. Keen, . . . 42
Ringbone, ... 384
Ripton, ... 79, 192
Road qualities of Percherons, . 137
Roaring, ... 384
Rowell, ... 391
Royal Morgan, ... 72
Runaway, to Stop, . . . 407
Russell, John E., . . . 30
Rysdyk, Wm. M., . . . 82
Rysdyk's Hambletonian, . . 82

Saddle Galls, ... 372
Sagacity of Horses, . . . 238
Salt for " . . . 261
Sanders, J. C., ... 126
Sand Crack, ... 386

Scot Grays, ... 317
Scours, ... 365
Scratches, ... 385
Seeley's American Star, . . 87
Seeley, Joseph, ... 82
Selecting Breeding Stock, . 151, 181
Selecting the Stallion, . 151, 181
Selecting the Brood Mare, . 155, 181
Setons, ... 391
Shanghai Mary, . . . 95, 226
Sherman, James, . . . 64
Sherman Morgan, . . 54–64
Shetland Isles, ... 141
Shetland Ponies, ... 141
Shoeing, ... 324
Shoe Boil, ... 389
Short Toes, ... 329
Short Brushes of Speed, . . 237
Showing Sale Horses, . . . 286
Shying, ... 232
Skin, ... 349
Slavering, ... 388
Slings, ... 368
Smith, Henry N., . . . 212
Sole, ... 320
Sole Leather Pads, . . . 330
Sontag, ... 207
Sore Back, ... 372
Southcote, Mary L., . . . 52
Spasmodic Colic, . . . 361
Splint, ... 392
Split Hoof, ... 386
Sprague's Hambletonian, . . 91
Sprains and Strains, . . . 391
St. Bel, ... 338
Stanford, Leland, . . . 94
Standard Admission, Trotting, . 408
" " Pacing, . 408
Stifle Joint, ... 389
Stocking of the Legs, . . 387
Stockton King, ... 438
String Halt, ... 396
Strains and Sprains, . . . 391
Strain of Coffin Joint, . . 393
Stumbling, ... 388
Suavity, ... 281
Surfeit, ... 392
Surrey, ... 58
Sucking Colts, ... 173
Sweat, ... 366
Sweeney, ... 390
Swapping Horses, . . . 289
Swelling of the Legs, . . . 387
Symptoms of Disease, . . 344
Swipe, ... 271

Tail Rubbing, ... 394
Team Record Trotting, . . 411
Team Record Pacing, . . 413
Teamsters, ... 263
The American Trotting Horse, . 117
The Bashaws and Clays, . . 106
The Coachman, ... 287
The Electric, ... 441
The 1st Chariot Cavalry, . . 26
The Flanks, ... 349
The Fireaways, ... 83
The Horse, ... 1
The Mouth, . . 239–276, 349
The Morgan Horse, . . . 60
The Swipe, ... 271
The Thoroughbred Horse, . . 44
Thick Water, ... 395
Thoroughbred Horses, . . 44
Thoroughpin, ... 395
Time to Succeed, . . . 280
Thumps, ... 316
Topgallant, ... 189
Tracks, How to lay out, . . 409
Train in Line, ... 235
Training for Speed, . . . 236
Training Circus Horses, . . 253
Training Vicious Horses, . . 242
Trotting Records, present and past. 414
Trotting Standard, . . . 408
True Britain, ... 61
Tumors, ... 394
Tushes, ... 301

Underhill, Bishop, . . . 48
Unsound Mares as Breeders, . 157
Use of the Whip, . . . 267
Use of the Brood Mares, . . 166

Value of Thoroughbred Stallions, 49
Value of Foods, ... 259

Value of Horses in U. S., . . 30
Vermont Cavalry, . . . 78
Veterinary Science, . . . 337
Veterinary Quacks, . . . 342

Wall of the Foot, . . . 319
Warranty, ... 407
War Bridle, ... 251
Wash for Trotters, . . . 278
Water Before Feeding, . . 259
Whoa! important to teach, . 233
Weaning Foals, ... 175
Whip, ... 238–267
White Turk, ... 46
Wild Air, ... 47–61
Wild Horses, ... 27–31
Wilson's Blue Bull, . . . 109
Wind Galls, ... 396
World's Fastest Record, trotting, 411
" " " pacing, 412
" Stallion " trotting, 411
" " " pacing, 412
Woodbury Morgan, . . . 72
Woodruff, Hiram, . . 194, 240
Wounds, ... 398
Worms, ... 396
Worm Ball, ... 397

Yankee, ... 123
Young Bashaw, ... 106

DIMON'S

HORSE AND CATTLE MEDICINE

CAREFULLY COMPOUNDED AND SOLD BY JOHN DIMON, AUTHOR AND PUBLISHER OF "AMERICAN HORSES AND HORSE BREEDING." "AMERICAN CATTLE AND CATTLE BREEDING," ETC.

The following list of valuable Medicines, when properly used in time, according to directions, are *warranted* to do all that the originator claims for them:

Dimon's Sparin Cure,	***8 oz. Bottles,*** -	***$1.00***
Dimon's Colic Remedy,	***10 oz.*** " -	***1.00***
Dimon's Black Oil,	***10 oz.*** " -	***1.00***
Dimon's Green Ointment, in Glass Jars,		***.50***
Dimon's Foot Rot "	" " "	***.50***
Dimon's Cow Pox "	" " "	***.50***
Diamond Dust, in Boxes, -	- - -	***.50***

Any of the above Medicines will be forwarded at once to any address on receipt of price, and no owner of horses or cattle can afford to be without them.

ADDRESS,

JOHN DIMON,

HARTFORD, CONN.

BOOK AGENTS WANTED.

AMERICAN CATTLE AND CATTLE BREEDING.

Breeds and their Special Merits. American Dairyman and Dairy Management. The Model and Practical Cattle Doctor

ON THE

CAUSE, NATURE, SYMPTOMS, AND TREATMENT

OF

DISEASES OF ALL KINDS.

Profusely Illustrated

BY

JOHN DIMON

AUTHOR OF

American Horses and Horse Breeding.

THE MOST COMPLETE, COMPREHENSIVE, AND INSTRUCTIVE BOOK EVER PUBLISHED ON THESE SUBJECTS AND INTENDED TO FILL A LONG FELT WANT OF THE AMERICAN CATTLEMEN, DAIRYMEN, AND GENERAL FARMERS. NOW IN PRESS.

All Communications relative to the above valuable Book should be Addressed to the Author and Publisher —

JOHN DIMON, HARTFORD, CONN.

AGENTS WANTED.

[EXCLUSIVE TERRITORY.]

Webster Family Library of Veterinary Medicine
Cummings School of Veterinary Medicine at
Tufts University
200 Westboro Road
North Grafton, MA 01536

PROPERTY OF SCHWENKSVILLE
COMMUNITY LIBRARY, INC.
SCHWENKSVILLE, PA.